

$R_{HO} I_{\mu, e} V_{\infty} v$

77227, Sov/89-8- 1-21/29

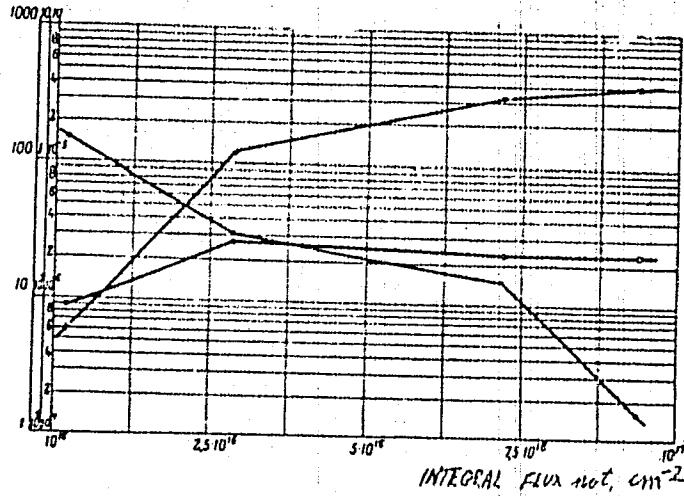


Fig. 4.  $I_{CS}$  (x),  $V_{\infty}$  (o) and  $R$  (p) of an  $U_3O_8$ -MgO sample vs integral neutron flux  $nvt$  at a constant neutron flux density of  $8 \cdot 10^{12} \text{ cm}^{-2} \cdot \text{sec}^{-1}$ .

Card 8/10

A Study of Electromotive Forces Generated  
in Semiconductor Systems Containing Uranium,  
When Irradiated in Reactors. Letter to the  
Editor

77227  
SOV/89-8-1-21/29

10% enriched sample gave a 15 times larger effect than  
the natural one. Authors used also oxides and sulfides  
of Be, Ni, Mo, W, Zn, and Co. In all cases they  
observed an emf, although the biggest effect occurred  
with the  $U_3O_8$ -MgO combination. Computation showed that  
in this last case 0.01% of the fragments' energy was  
transformed into electrical energy. Such small effi-  
ciency can be explained through the apparently short  
lifetime of the current carriers, and a poor relation  
between their diffusion path length compared with the  
sample thickness. The authors conclude that the emf  
is basically a result of a valve effect, although the  
volume and thermal emf may play some role too.  
Professor A. K. Krasin showed interest, G. N. Ushakov  
collaborated during experiments, and R. O. Bulycheva,  
V. A. Shulin, and G. V. Rykov were partially involved  
in experimental work. There are 4 figures; and 6  
references, 4 Soviet, 1 U.K., 1 U.S. The U.K. and

Card 9/10

A Study of Electromotive Forces Generated  
in Semiconductor Systems Containing Uranium,  
When Irradiated in Reactors. Letter to the  
Editor

77227  
SOV/89-8-1-21/29

U.S. references are: G. Kinchin, R. Pease, Repts Progr.  
Phys., 18, 1 (1955); J. Glen, Advances Phys., 4, Nr 16,  
381 (1955).

SUBMITTED: August 3, 1959

Card 10/10

GOLUBEV, V.I.; ZVONAREV, A.V.; NIKOLAYEV, M.N.; ORLOV, M.Yu.

Effect of reflectors made from different materials on an increase  
in neutron capture by the uranium shielding of a fast reactor.  
Atom. energ. 15 no.3:258-259 S '63. (MIRA 16:10)

(Neutrons—Capture) (Nucelar reactors)

L 06095-067 FOR SWISS: ACC NNR AF6021550

Thursday, September 26, 2002

CIA-RDP86-00513R0020657I0018-1

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8

9

0

1

2

3

4

using the proposed resonant indicators for reactor measurements. The authors thank V. I. Golubey, M. Yu. Orlov, and O. P. Uznadze for taking part in the work, and the crew of the BR-1 reactor and K. I. Nesterov for help with the measurements. Orig. art. has: 4 figures, 1 table, and 1 formula.

SUB CODE: 18/ SUBM DATE: 29Nov65/ ORIG REF: 010

Card 2/2 LC

Effect of reflectors made from various materials on the number of  
neutrons captured in the uranium carbide shield of a fast reactor.  
Atom. energ. 15 no.4:327-328 O '63. (MIRA 16:10)

BONDARENKO, I.I. [deceased]; GOLUBEV, V.I.; ZVONAROV, A.V.; NIKOLAYEV, M.H.;  
ORLOV, N.Yu.; UZNADZE, O.P.

Neutron propagation in uranium carbide. Atom. energ. 17 no.2:  
113-119 Ag '64 (MIRA 17:8)

MOROZOV, V. : ZVONAREV, E. : VINITSKIY, I.

Improve efficiency work. Den. i kred. 15 no.1:44-46 Ja '57.  
(MLRA 10:3)

(Banks and banking)

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1"

ZVONAREV, F.

Checking cash discipline at trade enterprises. Den. i kred.  
15 no.7:49-50 J1 '57. (MIRA 10:8)  
(Leningrad--Retail trade)  
(Banks and banking)

ZVONAREV, F.

Consolidating gains made. Den. i kred. 13 no.5:31-32 My '55.  
(Leningrad--Banks and banking) (MLRA 8:7)

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1"

ZVONAREV, I.; SENDERZON, E.; SHARUDO, I.; SHORIN, V.; BHUGUROV, V.;  
YUSUPOV, T.

In memory of Aleksei Borisovich Travin. Geol. i geofiz. no.4:116-  
119 '61. (MIRA 14:5)

(Travin, Aleksei Borisovich, 1908-1960)

Extrater. I. N. Zvezarov. U.S.S.R. 44,541, June  
30, 1946. M. Koest.

COPIES  
MATERIALS  
OPENS

1000 1210 1310 1410 1510

ASS-514 - METALLURICAL LITERATURE CLASSIFICATION									
TECHN. DIVISIONS									
GROUP	1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200
201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230
231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250
251	252	253	254	255	256	257	258	259	260
261	262	263	264	265	266	267	268	269	270
271	272	273	274	275	276	277	278	279	280
281	282	283	284	285	286	287	288	289	290
291	292	293	294	295	296	297	298	299	300
301	302	303	304	305	306	307	308	309	310
311	312	313	314	315	316	317	318	319	320
321	322	323	324	325	326	327	328	329	330
331	332	333	334	335	336	337	338	339	340
341	342	343	344	345	346	347	348	349	350
351	352	353	354	355	356	357	358	359	360
361	362	363	364	365	366	367	368	369	370
371	372	373	374	375	376	377	378	379	380
381	382	383	384	385	386	387	388	389	390
391	392	393	394	395	396	397	398	399	400
401	402	403	404	405	406	407	408	409	410
411	412	413	414	415	416	417	418	419	420
421	422	423	424	425	426	427	428	429	430
431	432	433	434	435	436	437	438	439	440
441	442	443	444	445	446	447	448	449	450
451	452	453	454	455	456	457	458	459	460
461	462	463	464	465	466	467	468	469	470
471	472	473	474	475	476	477	478	479	480
481	482	483	484	485	486	487	488	489	490
491	492	493	494	495	496	497	498	499	500
501	502	503	504	505	506	507	508	509	510
511	512	513	514	515	516	517	518	519	520
521	522	523	524	525	526	527	528	529	530
531	532	533	534	535	536	537	538	539	540
541	542	543	544	545	546	547	548	549	550
551	552	553	554	555	556	557	558	559	560
561	562	563	564	565	566	567	568	569	570
571	572	573	574	575	576	577	578	579	580
581	582	583	584	585	586	587	588	589	590
591	592	593	594	595	596	597	598	599	600
601	602	603	604	605	606	607	608	609	610
611	612	613	614	615	616	617	618	619	620
621	622	623	624	625	626	627	628	629	630
631	632	633	634	635	636	637	638	639	640
641	642	643	644	645	646	647	648	649	650
651	652	653	654	655	656	657	658	659	660
661	662	663	664	665	666	667	668	669	670
671	672	673	674	675	676	677	678	679	680
681	682	683	684	685	686	687	688	689	690
691	692	693	694	695	696	697	698	699	700
701	702	703	704	705	706	707	708	709	710
711	712	713	714	715	716	717	718	719	720
721	722	723	724	725	726	727	728	729	730
731	732	733	734	735	736	737	738	739	740
741	742	743	744	745	746	747	748	749	750
751	752	753	754	755	756	757	758	759	760
761	762	763	764	765	766	767	768	769	770
771	772	773	774	775	776	777	778	779	780
781	782	783	784	785	786	787	788	789	790
791	792	793	794	795	796	797	798	799	800
801	802	803	804	805	806	807	808	809	810
811	812	813	814	815	816	817	818	819	820
821	822	823	824	825	826	827	828	829	830
831	832	833	834	835	836	837	838	839	840
841	842	843	844	845	846	847	848	849	850
851	852	853	854	855	856	857	858	859	860
861	862	863	864	865	866	867	868	869	870
871	872	873	874	875	876	877	878	879	880
881	882	883	884	885	886	887	888	889	890
891	892	893	894	895	896	897	898	899	900
901	902	903	904	905	906	907	908	909	910
911	912	913	914	915	916	917	918	919	920
921	922	923	924	925	926	927	928	929	930
931	932	933	934	935	936	937	938	939	940
941	942	943	944	945	946	947	948	949	950
951	952	953	954	955	956	957	958	959	960
961	962	963	964	965	966	967	968	969	970
971	972	973	974	975	976	977	978	979	980
981	982	983	984	985	986	987	988	989	990
991	992	993	994	995	996	997	998	999	1000

"APPROVED FOR RELEASE: Thursday, September 26, 2002  
APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1  
CIA-RDP86-00513R002065710018-1"

ZVONAREV, I.N.

Fourth Conference of the Coordinating Committee on the Problem  
of "Regularities in the Distribution of Coals in the Earth's Crust."  
Geol. i geofiz. no.8:131-133 '62. (MIRA 15:10)  
(Coal geology—Congresses)

ZVONAREV, I.N., otv. red.; CHERNOVA, L.I., red.; SHMAKOVA, Ye.G.,  
tekhn. red.

[Papers of the First Conference of the Siberian Special Commission on the History of Coal Accumulation] Materialy pervogo soveshchaniia Sibirskoy tematicheskoy komissii po istorii ugle-nakopleniya. Novosibirsk, Izd-vo Sibirskogo otd-nija AN SSSR, No.1. 1961. 115 p. (MIRA 15:10)

1. Soveshchaniye Sibirskoy tematicheskoy komissii po istorii ugle-nakopleniya. 1st, Novosibirsk, 1959.  
(Siberia--Coal geology)

ZVONAREV, I.N.

Third Conference of the Siberian Commission on the study of the  
Distribution of and Prospecting for coals in the U.S.S.R. Geol.  
i geofiz. no.11:125-127 '61. (MIRA 15:2)  
(Coal geology)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1  
ANATOL'IEVA, Anna Ivanovna; ZVONAREV, I.M., cvt.red.; GREYNER, R.N., red.;  
MAZUROVA, A.F., tekhn.ref.

[Stratigraphy and problems of the Devonian paleogeography of the  
Minusinsk intermountainous trough] Stratigrafiia i nekotorye voprosy  
paleogeografii devona Minusinskogo mezhdornogo progiba. Novosibirsk,  
Izd-vo Sibirskogo otd-niia AN SSSR, 1960. 50 p. (Akademiia nauk SSSR.  
Sibirskoe otdelenie. Institut geologii i geofiziki. Trudy, no.2).

(MIRA 13:12)

(Minusinsk Basin--Geology, Stratigraphic)

(Minusinsk Basin--Paleography)

ZVONAREV, I.N.

Fifth Conference of the Interdepartmental Coordination Commission  
on the Problem "Characteristics of the Distribution of Fossil  
Coals in the Earth's Crust.". Geol. i geofiz. no.11:155-157 '64.  
(MIRA 18:4)

Combined study of coal sediments in Western Siberia and the Krasnoyarsk Territory. Trudy Gor.-geol. inst. Zap.-Sib. fil. AN SSSR no.18:3-17 '56. (MIRA 13:11)

(Siberia—Coal geology)

RHLONOVA, Anna Fedorovna; GREINER, N.N., red.; ZVONAREV, I.N., kand.geol.-mineral.nauk, red.; MAZUROVA, A.F., tekhn.red.

[Specific composition of pollen and spore complexes in upper Cretaceous deposits of the Chulym-Yenisey Depression] Vidovoi sostav pyl'tsy i spor v otlozheniakh verkhnego mela Chulymo-Eniseiskoi vpadiny. Novosibirsk, Izd-vo Sibirskogo otdelenia AN SSSR, 1960. 104 p. (Akademia nauk SSSR. Sibirskoe otdelenie. Institut geologii i geofiziki. Trudy, no.3). (MIRA 14:8) (Chulym Valley--Palynology) (Yenisey Valley--Palynology)

ZVONAREV, I. N.

Sept/Oct 1947

1947/Coal

Geology

"High Remuneration," I. N. Zvonarev, 2 pp

"Razvedka Nedr" No 5

Discusses the Stalin Prize winners G. P. Radchenko, V. I. Skoku, I. I. Molchanov, V. V. Stanov and I. N. Zvonarev, who were responsible for most of the discovery and development of coal bases in Siberia. They belong to the West Siberian Geological Administration and the Kuznets Basin Coal Development Trust. The author discusses the success that this group of men has had in the discovery of coking coal in the Tom'-Usinskiy region.

27X10

LC

ZVONAREV, I.N.

The problem of Siberian petroleum. Izv.vost.fil.AN SSSR no.6:35-38  
'57. (MLRA 10:9)

1. Zapadno-Sibirskiy filial Akademii nauk SSSR.  
(Siberia--Petroleum geology)

ZVONAREV, I.N., otv. red.

[Coal geology of Siberia and the Far East] Geologiya uglei  
Sibiri i Dal'nego Vostoka. Moskva, Nauka, 1965. 174 p.  
(MIRA 18:12)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut  
geologii i geofiziki.

Surveying

Problem of the minimum of operations in base networks of surface and mine surveying.  
(Trudy) VNIMI 22, 1950.

9. Monthly List of Russian Accessions, Library of Congress, October 1958, Uncl. 2

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 673 - I

BOOK

Call No.: AF500203

Author: ZVONAREV, K. A.

Full Title: CARTOGRAPHY

Transliterated Title: Kartografiya

PUBLISHING DATA

Originating Agency: None

Publishing House: Publishing House of Coal Technical Literature  
(UGLETEKHIZDAT)

Date: '1951 No. pp.: 212 No. of copies: 5,000

Editorial Staff

Tech. Ed.: Prof. V. V. Kavrayskiy and Prof. A. P. Yushchenko

PURPOSE: A textbook for students of Mine Engineering Departments,  
specializing in mine surveying. Approved by the Ministry of  
Higher Education of the USSR for students of institutions of  
higher learning. The book is dedicated to the 175th anniversary  
of the Leningrad Institute of Mining Engineers

TEXT DATA

Coverage: The preface states that the absence of a textbook on  
cartography corresponding to the mine surveying programs of  
mine institutes and forming part of the course in higher

Kartografiya

AID 673 - I

geodesy made it necessary to publish this book. The text includes an introduction, four chapters, a conclusion and four supplements. Chapter I covers general information on cartographic projections; Chapter II, conical and corresponding azimuthal projections; Chapter III, cylindrical, perspective and other of the most important projections; Chapter IV, construction and publishing of charts. The conclusion gives a brief history of the development of cartography and the importance of cartography to the mine surveying engineer. The supplements include:  
1) a table of the radii of curvature of the spheroid of F. N. Krasovskiy for every degree of latitudes from  $0^{\circ}$  to  $90^{\circ}$ ,  
2) tables for computation of the projection of Krasovskiy's spheroid, 4) some mathematical constants. 68 figures, diagrams and maps illustrate the text.

No. of References: A few in Russian in the text and footnotes  
Facilities: None

2/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1  
et'stvennyy redaktor;  
SLAVUNOV, A.N., redaktor izdatel'stva; ZIZUL'SKAYA, V.F.,  
tekhnicheskiy redaktor

[Reducing labor consuming operations in triangulation surveying]  
Snizhenie trudoemkosti marksheiderskikh triangulatsii. Moskva.  
Ugletekhizdat, 1957. 199 p. (MLRA 10:10)  
(Triangulation)

ABRAMOV, S.K., kand.tekhn.nauk; AVERSHIN, S.G., prof., doktor tekhn.nauk;  
AMMOSOV, I.I., doktor geol.-min.nauk; ANDRIYEVSKIY, V.D., inzh.;  
ANTROPOV, A.N., inzh.; APANAS'YEV, B.L., inzh.; BERGMAN, Ya.V.,  
inzh.; BLOKHA, Ye.Ye., inzh.; BOGACHEVA, Ye.N., inzh.; BUKRINSKIY, V.A.,  
kand.tekhn.nauk; VASIL'YEV, P.V., doktor geol.-min.nauk; VINOGRADOV,  
B.G., inzh.; GOLUBEV, S.A., inzh.; GORDIYENKO, P.D., inzh.; GUSEV, N.A.,  
kand.tekhn.nauk; DOROKHIN, I.V., kand.geol.-min.nauk; KALMYKOV, G.S.,  
inzh.; KASATOCHKIN, V.I., doktor khim.nauk; KOROLEV, I.V., inzh.;  
KOSTLIVTSEV, A.A., inzh.; KRATKOVSKIY, L.F., inzh.; KRASHENINNIKOV, G.P.,  
prof., doktor geol.-min.nauk; KRIKUNOV, L.A., inzh.; LEVIT, D.Ye., inzh.;  
LISITSA, I.G., kand.tekhn.nauk; LUSHNIKOV, V.A., inzh.; MATVEYEV, A.K.,  
dots., kand.geol.-min.nauk; MEPURISHVILI, G.Ye., inzh.; MIRONOV, K.V.,  
inzh.; MOLCHANOV, I.I., inzh.; NAUMOVA, S.N., starshiy nauchnyy sotrudnik;  
NIKIPENOV, V.Ye., inzh., PAVLOV, F.F., doktor tekhn.nauk; PANYUKOV, P.N.,  
doktor geol.-min.nauk; POPOV, V.S., inzh.; PYATLIN, M.P., kand.tekhn.  
nauk; RASHKOVSKIY, Ya.Z., inzh.; ROMANOV, V.A., prof., doktor tekhn.  
nauk; RYZHOV, P.A., prof., doktor tekhn.nauk; SELYATITSKIY, G.A., inzh.;  
SPERANSKIY, M.A., inzh.; TERENT'YEV, Ye.V., inzh.; TITOV, N.G., doktor  
khim.nauk; GOKAREV, I.F., inzh.; TROYANSKIY, S.V., prof., doktor geol.-  
min.nauk; FEDOROV, B.D., dots., kand.tekhn.nauk; FEDOROV, V.S., inzh.  
[deceased]; KHOMENTOVSKIY, A.S., prof., doktor geol.-min.nauk; TROYANOV-  
SKIY, S.V., otvetstvennyy red.; TERPIGOREV, A.M., red.; KRIKUNOV, L.A.,  
red.; KUZZNETSOV, I.A., red.; MIRONOV, K.V., red.; AVERSHIN, S.G., red.;  
BURTSEV, M.P., red.; VASIL'YEV, P.V., red.; MOLCHANOV, I.I., red.;  
RYZHOV, P.A., red.; BALANDIN, V.V., inzh., red.; BLOKH, I.M., kand.  
tekhn.nauk, red.; BUKRINSKIY, V.A., kand.tekhn.nauk, red.; VOLKOV, K.Yu.,  
inzh., red.; VOROB'YEV, A.A., inzh., red.; VVONARENKO, K.A., prof., doktor  
tekhn.nauk, red.

(Continued on next card)

ABRAMOV, S.K.--- (continued) Card 2.

ZDANOVICH, V.G., prof., doktor tekhn.nauk, red.; IVANOV, G.A., doktor geol.-min.nauk, red.; KARAVAYEV, N.M., red.; KOROTKOV, G.V., kand.geol.-min.nauk, red.; KOROTKOV, M.V., kand.tekhn.nauk, red.; MAKKAVEYEV, A.A., doktor geol.-min.nauk, red.; OMEL'CHENKO, A.N., kand.tekhn.nauk, red.; SENDERZON, E.M., kand.geol.-min.nauk, red.; USHAKOV, I.N., dots., kand.tekhn.nauk, red.; YABLOKOV, V.S., kand.geol.-min.nauk, red.; KOROLEVA, T.I., red.izd-va; KACHALKINA, Z.I., red.izd-va; PROZOROVSKAYA, F.L., tekhn.red.; NADEINSKAYA, A.A., tekhn.red.

[Mining; an encyclopedia handbook] Gornos delo; entsiklopedicheskii apravochnik. Glav. red. A.M.Terpigorev. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po ugol'noi promyshl. Vol.2. [Geology of coal deposits and surveying] Geologiya ugol'nykh mestorozhdenii i marksheiderskoe delo. Redkolegiia toma S.V.Troianskiy, 1957. 646 p. (MIRA 11:5)

1. Ghlen-korrespondent AN SSSR (for Karavayev)  
(Coal geology--Dictionaries)

SOV/154-58-2-12/22

AUTHOR: Zvonarev, K. A., Professor, Doctor of Technical Sciences

TITLE: With Reference to the Article by A. M. Leonov (Po povodu stat'i  
A. M. Leonova) Some Problems in Connection With the Formation  
of Marksheyder Mining Triangulations (Nekotoryye voprosy  
geometricheskogo postroyeniya Marksheyderskikh (rudnichnykh)  
triangulyatsiy)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i  
aerofotos"yemka, 1958, Nr 2, pp 105-106 (USSR)

ABSTRACT: This is a letter to the editors of the present periodical. The  
author is of the opinion that present fundamental work in the  
field of geodesy in the USSR creates a new geodetic basis for  
the development of new surveys (of all scales) as well as for  
the solution of geodetic engineering problems (also those ac-  
cording to the Marksheyder principle). The author considers the  
elimination of triangulation nets of the 5th and 6th classes  
(according to Marksheyder) by A. M. Leonov unacceptable. Here,  
he refers to his papers (quoted by Leonov) in which he says  
that he permits three and four density stages of the triangula-  
tion of the 2nd class and uses nets with sides of 2,3 and 1,5 km

Card 1/2

SOV/154-58-2-12/22

With Reference to the Article by A. M. Leonov. Some Problems in Connection  
With the Formation of Marksheyder Mining Triangulations

length, respectively. The author proves that the establishment of nets with a point density of more than 1,5 km (whereby points are placed directly among the points of the third and even second classes) is rational. The rather disadvantageous multi-stage structure of triangulation nets for the purposes of the Marksheyder method, to which A. M. Leonov wants to revert, is more precisely defined by the author.

ASSOCIATION: Leningradskiy ordena Lenina Gosudarstvennyy universitet im.  
A. A. Zhdanova (Leningrad Lenin Order State University imeni  
A. A. Zhdanova)

SUBMITTED: May 22, 1958

Card 2/2

ZVONAREV, K.A.

Basic problems in present-day cartography [with summary in English].  
(MIRA 11:5)  
Vest. IGU 13 no.6:91-100 '58.  
(Cartography)

ZVONAREV, K.A.

All-Union conference of Universities of the U.S.S.R. on scientific  
methods in geography. Vest.LGU 13 no.18:167-169 '58.  
(MIRA 12:1)

(Geography--Study and teaching)

ZVONAREV, K.

On the "Geodesy and cartography" journal. Mat. Otd. mat. geog.  
i kart. Geog. ob-va SSSR no.1:47-48 '61. (MIRA 17:8)

ZVONAREV, K.A.

Scientific legacy of V.V.Kavraiskii. Vest.LGU 18 no.6:143-149  
'63. (MIRA 16:4)  
(Kavraiskii, Vladimir Vladimirovich)

ZVONAREV, K.A.

Problems of cartography in the light of the CPSU program. Vest.  
LGU 17 no.18:56-62 '62. (MIRA 15:10)  
(Cartography)

CHURKIN, Vladimir Gerasimovich; PAVLOVSKIY, Ye.N., akademik, glavnnyy red.;  
ZVONAREV, K.A., doktor tekhn.nauk,red.; DADIN, Ye.G., red.izd-va;  
VINOGRADOVA, N.F., tekhn.red.

[Geographical atlases] Geograficheskie atlasy. Moskva, Izd-vo Akad.  
nauk SSSR, 1961. 116 p. (Geograficheskoe obshchestvo SSSR. Zapiski.  
Novaia seriia, vol.21.)

(MIRA 14:7)

(Atlases)

ZDANOVICH, Vyacheslav Grigor'yevich; KELL', Nikolay Georgiyevich;  
ZVONAREV, Klimentiy Aleksandrovich; BELOLIKOV, Antonin Mikolayevich;  
GUSEV, Nikolay Andreyevich; BUGAYETS, Ye.A., otv. red.; SLAVOROSOV, A.Kh., red. izd-va; PROZOROVSKAYA, V.L., tekhn. red.

[Advanced geodesy] Vysshiaia geodesiia. By V.G.Zdanovich i dr.  
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1961.  
607 p. (MIRA 15:1)

(Geodesy)

ZVONAREV, N.K., inzh.

Nomograms for solving problems of the stations of ground  
masses. [Trudy] VNIMI no. 47859-76 '62 {MIRA 3787}

**CHEKMAROV, A.P.; RABINOVICH, S.N.; Prinimali uchastiyi: KUS'MIN, V.P.;  
ZVONAREV, V.K.; DEMKO, V.M.**

Investigating power conditions in the rolling of lightweight  
shaped sections on a 550mm. medium section mill. Izv. vys. ucheb.  
zav.; chern. met. 6 no.4:56-67 '63. (MIRA 16:6)

1. Dnepropetrovskiy metallurgicheskiy institut.  
(Rolling mills)

ACCESSION NR: AP5014539

W/0089/65/018/009/0483/0487  
621.039.5\*2:621.039.546

AUTHOR: Likhachev, Yu. I.; Zvonarev, V. P.; Pupko, V. Ya.

33

TITLE: Internal stresses due to uneven swelling of fissioning material

19 B

SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 483-487

TOPIC TAGS: fissioning material, reactor fuel element, fuel element swelling, internal stress, macrostress

ABSTRACT: The authors consider a new cause of macrostresses of the first kind in fuel elements, namely uneven swelling of the fissioning material, brought about by the fact that the fission products are not produced at equal rates over the cross section of the fuel element. The resultant stresses are calculated under certain simplifying assumptions, with a fuel element in the form of a long solid cylindrical rod as an example. The joint action of the stresses due to uneven swelling and of the temperature stresses is considered for brittle material, for plastic material with negligible creep (metal at relatively low temperature), and plastic material with appreciable creep (relatively high temperature level). It is shown that the uneven swelling must be taken into account in the strength calculations in the case of brittle material and material with negligible creep. Orig. art.

Card 1/2

L 01063-66

ACCESSION NR: AP5014539

has: 2 figures and 8 formulas.

ASSOCIATION: none

SUBMITTED: 25May64

ENCL: 00

SUB CCODE: NP

NR REF SOV: 003

OTHER: 004

Card 2/2 /T

GORODETSKAYA, E.G. [Horodets'ka, E.H.]; ZVONAREVA, G.N. [Zypnar'ova, H.N.];  
SOFIYENKO, T.A. [Sofienko, T.A.]; YARMOLENKO, R.A.; ZHADANOVA, R.I.

Ballistocardiography in cardiovascular pathology in children.  
Fiziol. zhur. [ukr.] 8 no.5:600-608 S-0 '62. (MIRA 17:11)

1. Department of Pediatrics of the Kiyev Post-Graduate Institute  
for Physicians and the First Children's Hospital of Shevchenko  
District, Kiyev.

ZVONAREVA, G. N., Cand Med Sci -- "Condition of the cardiovascular system in typhoid-paratyphoid diseases of children, *clinical and cardiographic data,*" according to data supplied by the clinic and cardiographs."

Stalino, 1961. (Min of Health UkSSR. Stalin State Med Inst im A. M. Gor'kiy) (KL, 8-61, 261)

LEVIN, M.M.; ZVONAREVA, L.F.

Performance of peak diode voltmeters in measuring voltage of  
video pulses. Izm. tekhn. no.1:47-50 Ja '64.

(MIRA 17:11)

ACCESSION NR: AP4007678

S/0214/63/000/007/0064/0067

AUTHOR: Zvonareva, M. L.

TITLE: The  $H_{\alpha}$  line in the prominence spectra

SOURCE: Solnechnyye dannyye, no. 7, 1963, 64-67

TOPIC TAGS: solar prominence, hydrogen line, chromosphere, prominence spectrum, solar flare,  $H_{\alpha}$  line

ABSTRACT: Parameters which characterize the physical conditions in solar prominences can be determined by comparison of theoretical and observational contours of the  $H_{\alpha}$  line. Spectrograms obtained in the summer of 1960 at Pulkovo were used for determining cross sections of the  $H_{\alpha}$  line at various heights above the chromosphere level. Formulas for computing contours and intensities of hydrogen lines were developed by solving the problem of diffusion of radiation with redistribution of energy between lines, in accordance with the frequency within the line. The velocity of gas motion in a prominence is found to be  $11 \text{ km sec}^{-1}$ . Photometric cross sections of the  $H_{\alpha}$  line become narrower with increasing height above the chromosphere level. This phenomenon

Card 1/2

ACCESSION NR: AP4007678

may be caused by decreased scattering of quanta from the center of prominence toward its periphery without any change in the physical conditions within the prominence. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Kafedra astrofiziki Leningradskogo gosudarstvennogo universiteta (Department of Astrophysics, Leningrad State University)

SUBMITTED: 00 DATE ACQ: 21Jan64 ENCL: 00

SUB CODE: AS NO REF Sov: 001 OTHER: 000

Card 2/2

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1  
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1"

ARAKELYAN, M.A.; ZVONAREVA, M.L.; KOLESOV, A.K.

Calculating the Rosseland mean value for the atmospheres of  
hot stars. Uch. Zap. LGU no.323:37-44 '64. (MIRA 17:12)

Mollier  $i - x$  diagram and its use in designing evaporators. Prum  
potravin 15 no.5:226-235 My '64.

1. Faculty of Mechanical Engineering, Czech Higher School of  
Technology, Prague.

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

ZVONICEK, J., doc. inz. dr.

"Engineering for dairy and food products" by A.W. Farrall.  
Reviewed by Zvonicek. Prum potravin 15 no.4204 Ap '64.

ZVONAREVA, M.L.

Contours of emission lines in noncoherent scattering. Vest. LGU  
15 no.13:141-146 '60.  
(Light--Scattering) (MIRA 13:7)

81250

S/043/60/000/13/14/016  
C111/C222

24.4500

AUTHOR: Zvonareva, M.L.

TITLE: On the Contours of the Emission Lines at the non-Coherent  
Scattering

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki,  
mekhaniki i astronomii, 1960, No. 13, pp. 141 - 146

TEXT: The author considers the radiation diffusion in a plane plate for a  
completely incoherent scattering. For the diffusion there results the integral  
equation

$$(9) \quad B(\tau) = \frac{\lambda}{2} \int_0^\tau K(|\tau - \tau'|) B(\tau') d\tau' + B_0(\tau),$$

where  $\tau_0$  is the optical thickness of the plate,

$$(10) \quad K(\tau) = A \int_{-\infty}^{\infty} \alpha^2(x) E i [\alpha(x)\tau] dx,$$

Card 1/3

81250

On the Contours of the Emission Lines at the  
non-Coherent Scattering

S/043/60/000/13/14/016  
C111/C222

$$(11) E_i y = \int_y^{\infty} e^{-y} \frac{dy}{y}, \quad \alpha(x) = e^{-x^2}, \quad \Lambda = \frac{1}{\sqrt{\pi}}$$

and  $B, B_0$  are defined by

$$(3) \quad \epsilon_y^0 = \sigma_y B_0, \quad \epsilon_y = \sigma_y B,$$

where  $\sigma_y, \epsilon_y$  are the coefficients of absorption and emission,  $\epsilon_y^0$  relates to the direct emission of the sources. The solution of (9) is sought in the form

$$(13) \quad B(\tau) = a + b\tau - c\tau^2.$$

The results of the numerical calculations of  $a, b, c$  are given in tables. Then the contours of the emission lines are obtained according to the formula

$$(24) \quad I(x) = \alpha(x) \int_0^x B(\tau) e^{-\alpha(x)\tau} d\tau.$$

Card 2/3

On the Contours of the Emission Lines at the  
non-Coherent Scattering

81250  
S/043/60/000/13/14/016  
C111/C222

The appearance of a central depression is characteristical which appears for  
 $\tau_0 \sim 5$  and which increases with an increasing  $\tau_0$ .

The author mentions D. Ivanova. There are 2 figures, 4 tables and 2  
references : 1 Soviet and 1 Swiss.

Card 3/3

ZVONAREV, S. M., and A. F. FEOFANOV

Primenenie teoremy o trekh momentakh pri raschete gorizonta'l'nogo operenia.  
(Tekhnika vozduzhnogo flota, 1940, no. 12, p. 43-47, tables, diagrs.)

Title tr.: Application of the three moment equation in the design of  
horizontal control surfaces.

TL504.T4 1940

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of  
Congress, 1955.

"APPROVED FOR RELEASE: Thursday, September 26, 2002  
APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1  
CIA-RDP86-00513R002065710018-1"

**ZVONAREVA, M.L.**

Contours of absorption lines associated with noncoherent diffraction  
[with summary in English]. Vest. LGU 13 no.7:189-195 '58.

(MIRA 11:5)

(Stars--Spectra)

*ZVONAREVA, M.L.*  
AUTHOR: ZVONAREVA, M.L.

43-7-18/18

TITLE: The Contour of the Absorption Lines for an Incoherent Diffusion Process (O konturakh liniy pogloshcheniya pri nekogerentnom rasseyaniu)

PERIODICAL: Vestnik Leningradskogo Universiteta, Seriya Matematiki, Mekhaniki i Astronomii, 1958, Nr 7 (2), pp. 189-195 (USSR)

ABSTRACT: The author determines the contour of the absorption lines for a complete incoherent diffusion process and under the following assumption on the Planck's function  $B_\nu(T)$ :

$$B_\nu(T) = B_\nu(T_0)(a+bT+c e^{-mT}).$$

The paper joins papers of V.V. Sobolev [Ref. 3, 4] and the investigation carried out by the use of probability theoretical arrangements leads to an already published result of Ueno [Ref. 5]. Some little numerical data are of certain interest. There are 3 figures, 3 Soviet and 2 foreign references.

SUBMITTED: 18 May 1957

AVAILABLE: Library of Congress

Card 1/1 1. Functions-Theory 2. Diffusion

"APPROVED FOR RELEASE: Thursday, September 26, 2002  
APPROVED FOR RELEASE: Thursday, September 26, 2002  
ZVONAREVA, S.I. (Moskva)

CIA-RDP86-00513R002065710018-1  
CIA-RDP86-00513R002065710018-1"

Zealous investigators. Priroda 49 no.5:79 My '60.  
(MIRA 13:5)  
(Nature study)

ZVONAREVA, S.I.

Study of karst phenomena by the participants of the All-Union  
Pioneers and Students Expeditions. Inform.stor.Mazhd.kom.po  
izuch.geol.geogr. kar. no.1:227-232 '60. (MIRA 15:4)

1. Tsentral'naya detskaya ekskursionno-turistskaya stantsiya.  
(Karst)

AVONAREVA, V. G.: "Homework in the English language in the tenth class in connection with polytechnic training." Academy of Pedagogical Sciences RSFSR. Sci Res Inst of Teaching Methods. Moscow, 1955. (Dissertation for the Degree of Candidate in Pedagogical Science.)

*Knizhnaya letopis'*, No. 30, 1956. Moscow.

ZVONALEVA, V.V. (Moskva)

Prothrombin time in some infectious diseases. Klin.med. 36 no.3:  
121 -124 Mr '58. (MIRA 11:4)

1. Iz bol'nitsy imeni S.P.Botkina (glavnnyy vrach - prof. A.N. Shabanov, nauchnyy rekovoditel' raboty - doktor meditsinskikh nauk E.A.Gal'perin)

(PROTHROMBIN TIME, in various dis.

commun. dis. (Rus))

(COMMUNICABLE DISEASES, blood in prothrombin time (Rus))

Processing water fowl with hot water on a semiautomatic conveyor line. Mias. ind. SSSR. 30 no.4:36-37 '59. (MIRA 12:12)

1. Poltavskiy myasokombinat.  
(Water birds) (Poltava--Poultry plants)

ZVORAREVA, Ye.

Hot water processing of waterfowl. Mias.ind.SSSR 30 no.1:43  
'59. (MIRA 12:4)

1. Poltavskiy myasokombinat,  
(Poultry plants)

ZVONAREVA

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1"

3  
Washing of the fusel oil which is withdrawn from batch rectification apparatus. S. V. Bul'nev and Z. M. Zemrev (Mitrofany Alcohol Plant, Chelyabinsk). *Spravochnik*,  
Prim. 20, No. 1, 28-3 (1954). A simple device is described with drawing, where water is bubbled through the fusel oil.  
Werner Jacobson

10-30/2

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1"

**BUSHUYEV, S.V.; ZVONAREVA, Z.R.**

**Purification of fusel oil from periodic-action rectifiers. Spirit.prom.  
20 no.1:28-29 '54.  
(Fusel oil)**

**(MLRA 7:5)**

ACCESSION NR: AP5016887

UR/0374/65/000/000/0087/0002  
678:620.179.16

AUTHOR: Zvonarzh, V. (Furdubataq); Tamshina, I. (Furdubataq)

TITLE: Static and dynamic properties of fiberglass reinforced plastics.  
Part 2. The effects of thickness

SOURCE: Mekhanika polimorov, no. 3, 1966, 87-92

TOPIC TAGS: fiberglass reinforced plastic, plastic elasticity, elasticity modulus, polyester resin, Beer equation

ABSTRACT: In a previous communication (Mekh. polim., 1965, 1, 146), the authors described the influence of the individual components of polyester resin and glass on the dynamic E and G moduli, and the mechanical loss coefficients d and d' of fiberglass-reinforced plastics. The present paper is devoted to the study of thickness effects, i.e., the influence of the number of layers and the thickness of single layers on the statically and dynamically determined E and G elasticity moduli. The temperature effects were also studied. The fiberglass-reinforced plastic was made of Yplast 31 and the unmodified CHS-Polyester 104 resin with 2% methyl-ethyl ketone peroxide and 1% of a 10% solution of cobalt naphthenate in toluene. Tests showed that the E and G moduli are, for all practical purposes, independent of the total thickness of the material; they are sensitive, however, to the thickness of a single elementary layer, i.e., to the glass content 1/2

ACCESSION NR: AP5016887

within the plastics. The results are in good agreement with theoretical approximate equations; the systematic deviation indicates that the Beer equation (F. Beer, VDI Ztschr., 1959, 101, 463) neglected the wave-like packing of the fibers and assumed an ideal connection between the resin and glass. The dynamic moduli are, as a rule, larger (in absolute terms) than the corresponding static quantities and the difference increased with the temperature. Orig. art. has: 10 formulas, 2 figures, and 3 tables.

ASSOCIATION: None

SUBMITTED: 10 Nov 64

ENCL: 00

SUB CODE: MT

NO REF SOV: 002

OTHER: 003

Card

2/2

**ZVONKOVA, Z.V.; RODIONOV, A.N.; POVET'YEVA, Z.P.**

Role of hydrogen bonding in the structures of crystalline  
hydrates of compound thiocyanates of metals. Kristallografiia  
8 no.2:275-277 Mr-Ap '63. (MIRA 17:8)

1. Fiziko-khimicheskiy institut imeni Karpova.

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1  
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1"

AVONICK, Jan, doc. 102. d.r.  
Basic processes of food industry technology. Prum potravin  
16 no.1:Suppl.no.1:1-8 '65.

STOHLA, F., inz.; ZVONICEK, F.

Experiences in taking winter precautions in waterworks. Vod hosp 15 no.1:6-9 '65.

1. Prazske vodarny, Prague.

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

INVENTORS: Klimov, V. V.; Androyov, A. Ya.; Nakhodnova, A. P.; Kozachenko, V. N.; Akhkozov, Ye. A.; Ivanov, D. G.; Didkovskaya, O. S.; Zvonik, V. A.

ORG: none

TITLE: A method for obtaining a piezoceramic material. Class 21, No. 183812  
[announced by Donets Branch of All-Union Scientific Research Institute of Chemical  
Reagents and of High Purity Chemicals (Donetskiy filial Vsesoyuznogo nauchno-  
issledovatel'skogo instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh  
veshchestv)]

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 42

TOPIC TAGS: piezoelectric ceramic, barium compound, lead compound, calcium compound,  
titanium compound, sintered alloy

ABSTRACT: This Author Certificate presents a method for obtaining a piezoceramic  
material from a mixture of barium, lead, calcium, and titanium compounds by sintering  
this mixture. To lower the temperature of sintering this material, the above com-  
pounds are used in the form of nitric acid solutions of barium, lead, calcium, and  
titanium. This solution is atomized in a stream of air at the temperature of 400—  
500°C. After this, the powder is sintered at the temperature of 800—10000.

SUB CODE: 11/ SUBM DATE: 21May64

Card 1/1

UDC: 621.315.612.537.226.33

ZVONIMIR, Duric

"Some information about the prices of construction of hydro electric stations  
in the Brbas - Pliva system"

SO: ELEKTROPRIVREDA, May - June 1955

SOURCE CODE: UR/0363/66/002/008/1483/1486

AUTHOR: Klimov, V. V.; Kozachenko, V. N.; Didkovskaya, O. S.; Zvonik, V. A.; Kisel', T. P.; Andreyev, A. Ya.

53  
52  
B

ORG: All-Union Scientific Research Institute of Chemical Reagents and High-Purity Substances, Donets Branch (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chislykh veshchestv, Donetskii filial)

TITLE: Preparation of piezo- and ferroelectric ceramics using spray dried solutions

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 8, 1966, 1483-1486

TOPIC TAGS: piezoelectric ceramic, ferroelectric, ceramic technology, ceramic product, property, barium titanate, titanate, lead, calcium

ABSTRACT: A preparative method was described for piezo- and ferroelectric ceramic materials on the base of triple titanate of barium, lead, and calcium. The method was designed to replace the conventional ceramic sintering technique in view of its substantial disadvantages. The first step of the described method consisted of preparation of the finely dispersed (particle size 6-8  $\mu$ ) powder of the basic barium, lead, and calcium nitrates by spray drying of their aqueous solutions following a technique invented by the authors [Author Certificate no. 901979-29-14, 21.05.1964]. The powdered nitrates were then converted into titanates of varied

Card 1/2

UDC: 666.3:537.226.33+666.3:537.228.1

ACC NR: AP6029824

composition by firing the nitrate powder at 900-1000C at which temperature formation of the solid solutions with perovskite structure is completed. The particle size of titanates after firing was about 1  $\mu$ . High-purity powders may be obtained from adequately pure starting materials. The sintering of these powders into ceramic products occurs at a temperature in the 1230-1280C range, which is 100-150C lower than the temperature range of sintering the powders produced by conventional ceramic technique. The electrophysical properties of the ceramic products obtained by spray drying were shown to be superior to those of the products of ceramic technology. Notably, the piezoelectric modulus ( $d_{31}$ ) was comparatively higher and, in certain samples, constant in the -60 to +80C range. Universality of the method described was stressed, insofar as it may be applied to most of the ferro- and piezoelectric ceramics presently used. Orig. art. has: 4 figures and 2 tables. [JK]

SUB CODE: 11/ SUBM DATE: 22Oct65/ ORIG REF: 001/ ATO Press 5065

Card 212-10

ZVONIMIR GALL

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1"

"A biological Method of investigation of Insecticides in Vitro". Zvonimir Gall & Isak Levi Vets. at Vet. Inst. of Republic of Bosnia-Hercegovina, Sarajavo.

SOURCE: Vet., SVEZAK 4, p. 667, 1953

ROMM, Ye. S.; GORYUNOV, I. I.; GMID, L. P.; GROMOV, V. K.;  
DOROFEEYEVA, T. V.; KNORING, L. D.; KALACHEVA, V. M.; TATARINOV,  
I. V.; KLEYNOV, Yu. F.; KAPLAN, M. Ye.; ZVONITSKAYA, I. V.;  
MAZURKEVICH, Z. I.; DRRYABINA, N. N.; RUSAKOVA, L. Ya., vedushchiy  
red.; BARANOVA, L. G., tekhn. red.

[Methodological text on the study of the fracturing of rocks  
and fractured oil and gas reservoirs]. Metodicheskoe posobie  
po izucheniiu treshchinovatosti gornykh porod i treshchinnykh  
kollektorov nefti i gaza. Leningrad, Gostoptekhizdat, 1962.  
76 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'-  
skii geologorazvedochnyi institut. Trudy, no. 201).

(MIRA 16:4)

(Joints(Geology)) (Oil sands)

**EVONTSKAYA, T.M.**  
Hypertonia in scarlet fever in children. Sovet.med. no.3:9-10  
Mr '50. (GLML 19:2)

1. Of the Department of Children's Diseases, First Moscow Order  
of Lenin Medical Institute (Director of Department -- Prof.  
V.I.Molchanov).

S/123/61/000/014/015/045  
A004/A101

AUTHORS: Zvonitskiy, A. Yu.; Belosel'skiy, N. V.

TITLE: The practice of developing and introducing the gang technology.

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 14, 1961, 2, abstract 14B8. (V sb. "Grupovaya tekhnol. v mashinostr. i priborostr." Moscow - Leningrad, Mashgiz, 1960, 323-339)

TEXT: The introduction of the gang method was started with automatic and turret-lathe operations. For these purposes small-size pneumatic units with a clamping stress of 500 kg were utilized which made it possible to fasten in one fixture 3-4 parts simultaneously. The authors describe: a four-position gang fixture for the milling of slots, grooves and flats, a 72-position gang setting of a lapping automatic, indexing draw-in attachment, semi-automatic gang milling fixture for the processing of horned nuts, for-spindle drilling head with adjustable inter-center distances, gang jigs with automatic fastening and ejection of parts, fixture for the mandrel-less winding of cylindrical springs increasing the productivity by a factor of 10-15. The authors present examples of gang

Card 1/2

The practice of developing and introducing the ... 9/123/61/000/014/015/045  
A004/A101

machining on centerless grinding and thread-rolling machines, as well as on  
cold-upsetting automatics. There are 16 figures.

I. Briskman

[Abstracter's note: Complete translation]

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/3998

Zvonitskiy, Aleksandr Yulianovich, Engineer

Opyt gruppovoy obrabotki detaley na revol'vernykh stankakh (The Practice of Group Machining of Parts on Turret Lathes) Leningrad, 1959. 23 p. (Series: Leningrad. Dom nauchno-tehnicheskoy propagandy. Obmen peredovym opyтом. Seriya: Mekhanicheskaya obrabotka metallov, vyp. 10) 6,500 copies printed.

Sponsoring Agencies: Leningrad. Dom nauchno-tehnicheskoy propagandy, and Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znanii RSFSR.

Ed.: I.I. Verzhbinskaya, Engineer; Tech. Ed.: V.L. Gvirts.

PURPOSE: This booklet is intended for production engineers and technicians in machine-building plants.

COVERAGE: The booklet deals with group machining of parts on turret lathes. Two basic groups of turret lathes are discussed: 1) the 1336M turret lathe of the Kiyevskiy zavod (Kiyev Plant) and the "Skoda-36" with 36-mm spindle holes, and 2) turret lathes of the "Boley-type", such as "Boley", "Leymen," and "Wolman".

Card 1/2

The Practice of Group (Cont.)

SOV/3998

with 10- and 20-mm spindle holes. The author states that the adoption of group machining of parts on turret lathes results in considerable economy of machining time and the number of special fixtures and cutting tools required. The method of group machining is explained by means of classification diagrams, operation instruction sheets, and classification guiding sheets. The material presented is said to be limited in scope, as it is based on practices and methods developed in only one plant. No personalities are mentioned. There are 3 references, all Soviet.

TABLE OF CONTENTS: None given.

AVAILABLE: Library of Congress

Card 2/2

VK/rw/gmp  
7-27-60

GAFT, Ya.M., kand.med.nauk; Prinimalni uchastiye: BRANZBURG, N.A., vrach;  
GOL'TS, I.P., vrach; GORELIK, Ye.S., vrach; ZVONKINA, O.M., vrach;  
LIVSHITS, R.I., vrach; LUR'YE, Ye.L., vrach; OZHE, N.B., vrach;  
RYBAL'SKAYA, V.G., vrach; CHELNOKOVA, A.K., vrach; YAVORSKIY, A.V.,  
vrach

Dynamics of the tuberculous process in patients transferred to the  
third group of dispensary registration. Probl. tub. 38 no.3:3-8  
'60. (MIRA 14:5)

1. Iz protivotuberkuleznogo dispansera No.4 Moskvy (glavnny vrach  
zasluzhenny vrach RSFSR S.M.Zamukhovskiy).

(TUBERCULOSIS)

BUTOMO, D.G.; VAYZHLYA, N.M.; ZVONKINA, V.F.; KOSHURIN, A.V.; SERGEYEV, L.N.;  
FRUMKINA, Yu.A.

Concerning the "Handbook on the processing of nonferrous metals and  
alloys" Tsvet.met. 35 no.12:60 D 162. (MIRA 16:2)

1. Sovet Nauchno-tehnicheskogo obshchestva zavoda "Krasnyy  
Vyborzhets".

(Nonferrous metals)

~~ZIVKO, LUKOCEVIC~~  
A new method for electric-arc welding in CO<sub>2</sub> + UM. Zavarivanje 5  
no.11/12;260-266 D '62.

KOS'KOV, B.I.; MUKHIN, N.S.; SMIRNOV, A.A., kand. tekhn. nauk; NIKITIN, V.I., prepodavatel'; KONDRAT'YEVA, N.Ya., kand. tekhn. nauk, prepodavatel'; LOSEV, K.A., dotsent; ZVONKOV, A.P.; KOMAROVSKIY, V.M.; MARCHENKO, S.N., kand. tekhn. nauk

Discussion of an article by B.I. Gerzhuly. Geod. i kart. no.4:28-36 Ap '64. (MIRA 17:8)

1. Nachal'nik tekhnicheskogo otdela Moskovskogo gorodskogo tresta geologo-geodezicheskikh i kartograficheskikh rabot (for Kos'kov). 2. Nachal'nik kompleksnogo otdela Moskovskogo otdeleniya TSentral'nogo tresta inzhenerno-stroitel'nykh izyskaniy (for Mukhin). 3. Nachal'nik geodezicheskoy sluzhby pri Upravleni glavnogo arkhitekta Voronezha (for Smirnov) 4. Kafedra geodezii Khabarovskogo politekhnicheskogo instituta (for Nitkin). 5. Kafedra kartografii Leningradskogo gosudarstvennogo universiteta (for Kondrat'yeva). 6. Kuybyshevskiy inzhenerno-stroitel'nyy institut (for Losev). 7. Rukovoditel' sektora Nauchno issledovatel'skogo institut gradostroitel'stva Kiiev (for Marchenko).

ACCESSION NR: AP4041736

S/0181/64/006/007/2198/2200

AUTHORS: Girayev, M. A.; Karpovich, I. A.; Zvonkov, B. N.

TITLE: Frequency dependence of the field effect in photosensitive films of CdS

SOURCE: Fizika tverdogo tela, v. 6, no. 7, 1964, 2198-2200

TOPIC TAGS: thin film, cadmium sulfide, photoconductivity, frequency dependence, carrier mobility, photosensitivity

ABSTRACT: The investigation was undertaken in view of recent interest in such films, brought about by the development of field-effect transistors on their basis (P. K. Weimer, Proc. IRE v. 50, 1526, 1962). The films were prepared on glass substrates by evaporation in vacuum, and activated by heat treatment with air in a photoconductor powder. The frequency dependence was investigated by the method of Aigrain et al. (J. Phys. Rad. v. 13, 587, 1952). Constant

Card 1/5

ACCESSION NR: AP4041736

illumination was used to reduce the layer resistance and to make the method usable at high temperatures. The effective carrier mobility was found to be practically independent of the temperature but highly dependent on the intensity of illumination. For unactivated CdS layers with increased dark conductivity and weak photosensitivity, the effective mobility did not exceed  $1 \text{ cm}^2/\text{V}\cdot\text{sec}$  and was practically constant up to 20 kcs. The appreciable change in the effective mobility of photosensitive layers occurs in the same frequency interval in which the photocurrent changes strongly as a frequency of the light modulation frequency and is apparently connected with relaxation of the photoconductivity. The decrease in mobility beyond about 20 kcs may be due to disturbance of the equilibrium of the induced carriers with rapid surface states. A somewhat unexpected effect is that in polycrystalline CdS films the effective mobility at high frequencies may become comparable with that for CdS single crystals. This is confirmed by Hall-effect measurements, which will be reported elsewhere. "The authors thank S. Abdiyev

Card 2/5

ACCESSION NR: AP4041736

for preparing the samples for the investigation." Orig. art. has:  
2 figures.

ASSOCIATION: Gor'kovskiy gosudarstvennyy universitet (Gorkiy  
State University)

SUBMITTED: 22Feb64

ENCL: 02

SUB CODE: SS, EC

NR REF Sov: 002

OTHER: 004

Card 3/5

ACCESSION NR: AP4041736

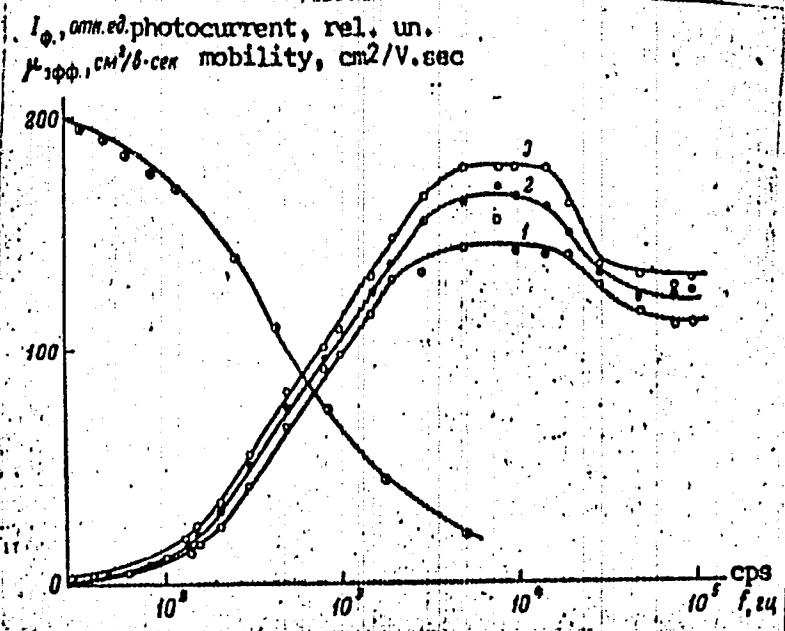
ENCLOSURE, 01

Frequency dependence of effective carrier mobility in CdS film (sample 1) under constant illumination

T, °C: 1 - 25, 2 - 58, 3 - 88;

4 - photocurrent vs. light modulation frequency at 25°C

Card 4/5



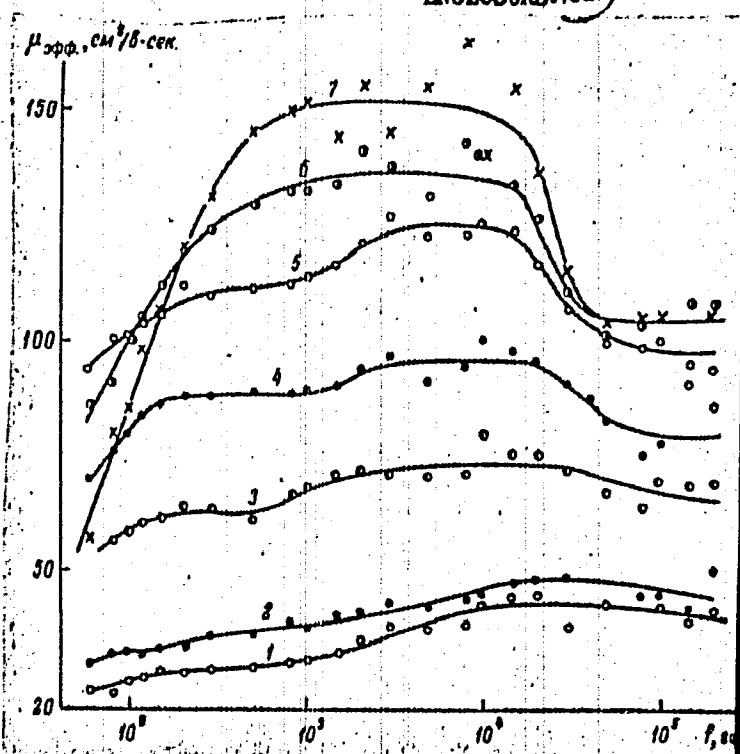
ACCESSION NR: AP4041736

ENCLOSURE: 02

Frequency dependence of effective carrier mobility in CdS film (sample 2) under different illuminations

Film resistance under illumination, kilohm: 1 - 1000, 2 - 600, 3 - 300, 4 - 100, 5 - 40, 6 - 20, 7 - 10.

Card 5/5



Automatic welding of aluminum with a melting electrode. Avtom.svar.  
9 no.1:21-28 Ja-F '56. (MIRA 9:6)

1.Ordens Trudovogo Krasnogo Znameni Institut elektrosvarki imeni  
Ye.O.Patona AN USSR.  
(Aluminum—Welding) (Electric welding)

**BABKIN, D.M.; ZVONKOV, M.L.; VERCHENKO, V.A.**

Making welded aluminum-magnesium alloy containers. Avtom. svar.  
11 no. 4:84-91 Ap '58. (MIRA 11:6)

1. Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im.  
Ye.O. Patona AN USSR (for Babkin, Zvonkov). 2. Trest po montazu  
prodovol'stvennykh predpriyatiy (for Verchenko).

(Aluminum-magnesium alloy—Welding)  
(Tanks—Welding)

**RABKIN, D.M.; ZVONKOV, M.L.**

Automatic welding of aluminum using twin electrodes. Avtom. svar.  
11 no. 5:25-31 My '58.  
(MIRA 11:6)

1. Ordona Trudovogo Krasnogo Znameni Institut elektrosvarki im.  
Ye.O. Patona AN USSR.

(Aluminum-Welding) (Electrodes)

125-58-4-12/15

AUTHORS: Rabkin, D.M., Candidate of Technical Sciences, Zvonkov, M.L. and Verchenko, V.A., Engineers

TITLE: Experience in Constructing Welded Aluminum-Magnesium Containers (Opyt izgotovleniya svarnykh yemkostey iz aluminievogo-magniyevogo splava)

PERIODICAL: Avtomaticheskaya Svarka, 1958, Nr 4, pp 84-88 (USSR)

ABSTRACT: A detailed description is given of all operations performed in assembling 700 m<sup>3</sup> aluminum-magnesium alloy containers at the Kombinat sinteticheskikh zhirozameniteley (Synthetic Fat Substitutes Combine). The electric arc welding method is used for all horizontal connections, and oxy-gas (propane-butane mixture) for the vertical welds which are welded by two operators simultaneously - one on the inside and one on the outside of the container, so that the operation proceeds with only one welding puddle. The information includes the chemical composition of the base metal - "AMg5B" alloy - and special "AN-A103" electrode coating and "AN-A201" flux developed for the purpose at the Electric Welding Institute imeni Paton (Tables 1, 2). The following persons participated in the work:

Card 1/2

125-58-4-12/15  
Experience in Constructing Welded Aluminum-Magnesium Containers

G.B. Al'terman, I.M. Bolotin, V.M. Pauler, L.D. Polonskiy,  
O.A. Videnskiy, P.K. Chubukov, I.I. Kravtsov, Ya.M.  
Yalovoy.

There are 3 tables and 7 photographs.

ASSOCIATION: Institut elektrosvarki imeni Ye.O. Patona AN UkrSSR (Electric Welding Institute imeni Ye.O. Paton of the AS UkrSSR);  
Prodmontazh.

SUBMITTED: December 3, 1957

AVAILABLE: Library of Congress

Card 2/2

ZVONKOV, M.L.

125-58-5-4/13

AUTHORS: Rabkin, D.M., and Zvonkov, M.L.

TITLE: Automatic Welding of Aluminum by a Split Electrode (Avtomatischeeskaya svarka alyuminiya rasshcheplennym elektrodom)

PERIODICAL: Avtomatischeeskaya Svarka, 1958, Nr 5, pp 25-31 (USSR)

ABSTRACT: The peculiarities and application of the split-electrode method of welding were given previously [Ref. 2,3 and 4]. The method consists of the use of two electrodes moving parallel to one another and producing two puddles which merge when the distance between the electrodes diminishes. The merged-puddle is wider and shallower than the puddle produced by a single arc. The method is schematically illustrated (Fig. 1) and calculations of the fusion depth as a function of the distance between electrodes are made. The method permits welding butt-joints without the use of a steel support. The welds are dense, wide, with good mechanical properties. Regular welding equipment needs only minor adjustment when applying the split-electrode method: a special pulling-type holder (Fig. 5) with two pairs of guide pipes, and an additional bobbin for electrode wire. The method has been successfully introduced at the Kiyev plant

Card 1/2

125-58-5-4/13

Automatic Welding of Aluminum by a Split Electrode

"Bol'shevik" where it is used for welding aluminum vessels (the technology is briefly described in figure 6 and 7). The following advantages resulted: consumption of electrode wire has been reduced by 40%, and electric energy by 20%. Work efficiency has increased three times as compared with manual arc welding. The following engineers of the "Bol'shevik" plant took part in developing the split-electrode welding technology: I.M. Mirgorodskiy, F.S. Bugriy, V.M. Ponomar', I.M. Savich, V.M. Grishchenko.

There are 7 figures and 5 Soviet references.

ASSOCIATION: Institut elektrosvarki imeni Ye.O. Patona AN UkrSSR (Electric Welding Institute imeni Ye.O. Paton of the AS UkrSSR)

SUBMITTED: January 9, 1958

AVAILABLE: Library of Congress

Card 2/2

Academy of Sciences of the USSR, Institute of Electrotechnics and Radioelectronics, 307/5  
Vvedenie novykh sposobov starta i pronyshcheniya v proyektu elektrovaristyannya  
pp. 3. (Introduction of New Starting Methods in Industrial  
Electronics. v. 3) Lyube, Gos. Izd-vo Tekhn. Lit.  
USSR, 1960. 207 p. 50000 copies printed.

Ed.: H. Pisarenko; Tuch. Ed.: S. Maříšek

**PURPOSE:** This collection of articles is intended for personnel in the welding industry.

**COVERAGE:** The article deal with the combined experiences of the Institute of Electric Power and the Institute of Electric Welding.

September 10, 1970, and several industrial enterprises in solving scientific and engineering problems in welding technology. Problems in the application of new methods of mechanized welding and electron-beam welding in industry is the third collection of articles published under the same title. The Foreword was written by B. M. Paton, Academician of Sciences Ukrainian SSR and Lenin prize winner. There are no references.

PARKS OF GREECE

ZHURKOV, M. I. [Engineer], D. M. Sabatin [Candidate of Technical Sciences], I. M. Savitch [Engineer], Electric Wadzhin Institute [Ingenieur], Ye. O. Pitsch [V. A. Verczenko Engineer of the Trust "Production of Food Industry Establishments"], and I. M. Marforog [Formerly Chief Engineer of the "Solnechnik" Plant]. Experience in the Successive Workings of Alusius and Izo.

176  
Bogolyubov, B. (Candidate of Technical Sciences, Electric  
Engineering Institute) Imm. Ye. O. Savchenko, A. I. Ivanovskaya  
("Central Galvanic Construction") and S. Yu. Smirnov ("Open Fabricated Steel  
Construction") and S. V. Burovich ("Great Dispersal Steel  
Construction") and G. D. Pashkov ("Great Dispersal Steel  
Construction"). Experiments on the Mechanization of Welding [Operations].  
Experiments on the Mechanization of Welding [Operations]. In the Prepara-  
tion of Metallic Structures for a Blast-Furnace Plant

176  
194

## PERIODICAL ABSTRACTS

Sub.: USSR/Engineering

AID 4191 - P

RABKIN, D. M. and M. L. ZVONKOV

VOPROSY TEKHNOLOGII AVTOMATICHESKOY SVARKI ALYUMINIYA PLAVYASHCH-  
IMSYA ELEKTRODOM (Technical problems in Automatic Welding of  
Aluminum with Melting Electrodes). Avtomaticheskaya svarka,  
no. 1, Ja/F 1956: 21-29.

The technique and equipment used in automatic welding of aluminum with semi-open melting electrodes are discussed: amount of current required, thickness of electrode-wire used and determination of the electrode feeding speed and most favorable voltage. The selection of the proper welding speed and the exact quantity of flux used to get the best quality of welded seam with consideration of the thickness of the metal to be welded, and a description of a spout mechanism for feeding electrode wire, as well as of a measuring hopper for spreading flux, are presented. One table, 3 graphs and 7 macropictures. Four Russian references, 1953-1955.

$R_{HO} I_{\mu, e} V_{\infty} v$

77227, Sov/89-8- 1-21/29

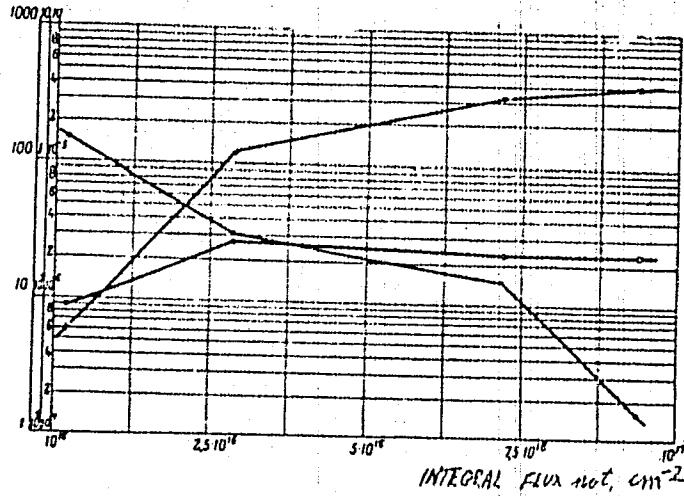


Fig. 4.  $I_{CS}$  (x),  $V_{\infty}$  (o) and  $R$  (p) of an  $\text{U}_3\text{O}_8\text{-MgO}$  sample vs integral neutron flux  $nvt$  at a constant neutron flux density of  $8 \cdot 10^{12} \text{ cm}^{-2} \cdot \text{sec}^{-1}$ .

Card 8/10

A Study of Electromotive Forces Generated  
in Semiconductor Systems Containing Uranium,  
When Irradiated in Reactors. Letter to the  
Editor

77227  
SOV/89-8-1-21/29

10% enriched sample gave a 15 times larger effect than  
the natural one. Authors used also oxides and sulfides  
of Be, Ni, Mo, W, Zn, and Co. In all cases they  
observed an emf, although the biggest effect occurred  
with the  $U_3O_8$ -MgO combination. Computation showed that  
in this last case 0.01% of the fragments' energy was  
transformed into electrical energy. Such small effi-  
ciency can be explained through the apparently short  
lifetime of the current carriers, and a poor relation  
between their diffusion path length compared with the  
sample thickness. The authors conclude that the emf  
is basically a result of a valve effect, although the  
volume and thermal emf may play some role too.  
Professor A. K. Krasin showed interest, G. N. Ushakov  
collaborated during experiments, and R. O. Bulycheva,  
V. A. Shulin, and G. V. Rykov were partially involved  
in experimental work. There are 4 figures; and 6  
references, 4 Soviet, 1 U.K., 1 U.S. The U.K. and

Card 9/10

A Study of Electromotive Forces Generated  
in Semiconductor Systems Containing Uranium,  
When Irradiated in Reactors. Letter to the  
Editor

77227  
SOV/89-8-1-21/29

U.S. references are: G. Kinchin, R. Pease, Repts Progr.  
Phys., 18, 1 (1955); J. Glen, Advances Phys., 4, Nr 16,  
381 (1955).

SUBMITTED: August 3, 1959

Card 10/10

GOLUBEV, V.I.; ZVONAREV, A.V.; NIKOLAYEV, M.N.; ORLOV, M.Yu.

Effect of reflectors made from different materials on an increase  
in neutron capture by the uranium shielding of a fast reactor.  
Atom. energ. 15 no.3:258-259 S '63. (MIRA 16:10)

(Neutrons—Capture) (Nucelar reactors)

L 06095-067 FOR SWISS: ACC NNR AF6021550

Thursday, September 26, 2002

CIA-RDP86-00513R0020657I0018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R0020657I0018-1

SOURCE CODE: UR/0089/66/020/006/0518/0520

AUTHOR: Zvonarev, A. V.; Koleganov, Yu. F.; Mikhaylus, F. F.; Nikolayev, M. N.

ORG: none

19

35  
31  
B

TITLE: Measurement of neutron spectra in the energy region up to 3 kev by resonant indicators

SOURCE: Atommaya energiya, v. 20, no. 6, 1966, 518-520

TOPIC TAGS: nuclear reactor, neutron spectroscopy, reactor neutron flux, fast neutron, neutron capture/  
BR-1 reactor nuclear

ABSTRACT: The authors propose a modification of the method of V. I. Golubev et al. (Atommaya energiya v. 11, 1961) for measuring neutron spectra at different points inside a nuclear reactor through the use of resonant self-screening of indicators by filters of the same material. The authors' modification, aimed at extending the possible energy range, consists of using the first resonances of neutron capture in  $W^{180}$ ,  $Mn^{55}$ , and  $Na^{23}$ . The filter resonant self-screening factors needed to make use of the method are calculated for different thicknesses of the indicators themselves and of the filters surrounding them. Plots of these factors, obtained by a Monte Carlo computer calculation, are presented. The method was used to measure the distribution of neutrons with energies corresponding to the first resonances of  $In^{113}$ ,  $Au^{197}$ ,  $W^{180}$ ,  $Mn^{55}$ , and  $Na^{23}$  inside a uranium block measuring 70 x 70 x 90 cm bombarding with neutrons in the Fermi spectrum. The results confirmed the possibility of

Card 1/2

UDC: 539.125.52

using the proposed resonant indicators for reactor measurements. The authors thank V. I. Golubey, M. Yu. Orlov, and O. P. Uznadze for taking part in the work, and the crew of the BR-1 reactor and K. I. Nesterov for help with the measurements. Orig. art. has: 4 figures, 1 table, and 1 formula.

SUB CODE: 18/ SUBM DATE: 29Nov65/ ORIG REF: 010

Card 2/2 LC

Effect of reflectors made from various materials on the number of  
neutrons captured in the uranium carbide shield of a fast reactor.  
Atom. energ. 15 no.4:327-328 O '63. (MIRA 16:10)

BONDARENKO, I.I. [deceased]; GOLUBEV, V.I.; ZVONAROV, A.V.; NIKOLAYEV, M.H.;  
ORLOV, N.Yu.; UZNADZE, O.P.

Neutron propagation in uranium carbide. Atom. energ. 17 no.2:  
113-119 Ag '64 (MIRA 17:8)

MOROZOV, V. : ZVONAREV, E. : VINITSKIY, I.

Improve efficiency work. Den. i kred. 15 no.1:44-46 Ja '57.  
(MLRA 10:3)

(Banks and banking)

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1"

ZVONAREV, F.

Checking cash discipline at trade enterprises. Den. i kred.  
15 no.7:49-50 J1 '57. (MIRA 10:8)  
(Leningrad--Retail trade)  
(Banks and banking)

ZVONAREV, F.

Consolidating gains made. Den. i kred. 13 no.5:31-32 My '55.  
(Leningrad--Banks and banking) (MLRA 8:7)

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1"

ZVONAREV, I.; SENDERZON, E.; SHARUDO, I.; SHORIN, V.; BHUGUROV, V.;  
YUSUPOV, T.

In memory of Aleksei Borisovich Travin. Geol. i geofiz. no.4:116-  
119 '61. (MIRA 14:5)

(Travin, Aleksei Borisovich, 1908-1960)

Extrater. I. N. Zvezarov. U.S.S.R. 66,501, June  
30, 1946. M. Koest.

ASS-51A - METALLURICAL LITERATURE CLASSIFICATION

TECHN. DIVISIONS: -

GROUPS: -

TECHN. SUBDIVISIONS: -

KNOWN COM. LIT.

UNPUBLISHED LIT.

NEW LIT.

NOTES

"APPROVED FOR RELEASE: Thursday, September 26, 2002  
APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1  
CIA-RDP86-00513R002065710018-1"

ZVONAREV, I.N.

Fourth Conference of the Coordinating Committee on the Problem  
of "Regularities in the Distribution of Coals in the Earth's Crust."  
Geol. i geofiz. no.8:131-133 '62. (MIRA 15:10)  
(Coal geology—Congresses)

ZVONAREV, I.N., otv. red.; CHERNOVA, L.I., red.; SHMAKOVA, Ye.G.,  
tekhn. red.

[Papers of the First Conference of the Siberian Special Commission on the History of Coal Accumulation] Materialy pervogo soveshchaniia Sibirskoy tematicheskoy komissii po istorii ugle-nakopleniya. Novosibirsk, Izd-vo Sibirskogo otd-nija AN SSSR, No.1. 1961. 115 p. (MIRA 15:10)

1. Soveshchaniye Sibirskoy tematicheskoy komissii po istorii ugle-nakopleniya. 1st, Novosibirsk, 1959.  
(Siberia--Coal geology)

ZVONAREV, I.N.

Third Conference of the Siberian Commission on the study of the  
Distribution of and Prospecting for coals in the U.S.S.R. Geol.  
i geofiz. no.11:125-127 '61. (MIRA 15:2)  
(Coal geology)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1  
ANATOL'IEVA, Anna Ivanovna; ZVONAREV, I.M., cvt.red.; GREYNER, R.N., red.;  
MAZUROVA, A.F., tekhn.ref.

[Stratigraphy and problems of the Devonian paleogeography of the  
Minusinsk intermountainous trough] Stratigrafiia i nekotorye voprosy  
paleogeografii devona Minusinskogo mezhdornogo progiba. Novosibirsk,  
Izd-vo Sibirskogo otd-niia AN SSSR, 1960. 50 p. (Akademiia nauk SSSR.  
Sibirskoe otdelenie. Institut geologii i geofiziki. Trudy, no.2).

(MIRA 13:12)

(Minusinsk Basin--Geology, Stratigraphic)

(Minusinsk Basin--Paleography)

ZVONAREV, I.N.

Fifth Conference of the Interdepartmental Coordination Commission  
on the Problem "Characteristics of the Distribution of Fossil  
Coals in the Earth's Crust.". Geol. i geofiz. no.11:155-157 '64.  
(MIRA 18:4)

Combined study of coal sediments in Western Siberia and the Krasnoyarsk Territory. Trudy Gor.-geol. inst. Zap.-Sib. fil. AN SSSR no.18:3-17 '56. (MIRA 13:11)

(Siberia—Coal geology)

RHLONOVA, Anna Fedorovna; GREINER, N.N., red.; ZVONAREV, I.N., kand.geol.-mineral.nauk, red.; MAZUROVA, A.F., tekhn.red.

[Specific composition of pollen and spore complexes in upper Cretaceous deposits of the Chulym-Yenisey Depression] Vidovoi sostav pyl'tsy i spor v otlozheniakh verkhnego mela Chulymo-Eniseiskoi vpadiny. Novosibirsk, Izd-vo Sibirskogo otdelenia AN SSSR, 1960. 104 p. (Akademia nauk SSSR. Sibirskoe otdelenie. Institut geologii i geofiziki. Trudy, no.3). (MIRA 14:8) (Chulym Valley--Palynology) (Yenisey Valley--Palynology)

ZVONAREV, I. N.

Sept/Oct 1947

1947/Coal

Geology

"High Remuneration," I. N. Zvonarev, 2 pp

"Razvedka Nedr" No 5

Discusses the Stalin Prize winners G. P. Radchenko, V. I. Skoku, I. I. Molchanov, V. V. Stanov and I. N. Zvonarev, who were responsible for most of the discovery and development of coal bases in Siberia. They belong to the West Siberian Geological Administration and the Kuznets Basin Coal Development Trust. The author discusses the success that this group of men has had in the discovery of coking coal in the Tom'-Usinskiy region.

27X10

LC

ZVONAREV, I.N.

The problem of Siberian petroleum. Izv.vost.fil.AN SSSR no.6:35-38  
'57. (MLRA 10:9)

1. Zapadno-Sibirskiy filial Akademii nauk SSSR.  
(Siberia--Petroleum geology)

ZVONAREV, I.N., otv. red.

[Coal geology of Siberia and the Far East] Geologiya uglei  
Sibiri i Dal'nego Vostoka. Moskva, Nauka, 1965. 174 p.  
(MIRA 18:12)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut  
geologii i geofiziki.

Surveying

Problem of the minimum of operations in base networks of surface and mine surveying.  
(Trudy) VNIMI 22, 1950.

9. Monthly List of Russian Accessions, Library of Congress, October <sup>2</sup> 1958, Uncl.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 673 - I

BOOK

Call No.: AF500203

Author: ZVONAREV, K. A.

Full Title: CARTOGRAPHY

Transliterated Title: Kartografiya

PUBLISHING DATA

Originating Agency: None

Publishing House: Publishing House of Coal Technical Literature  
(UGLETEKHIZDAT)

Date: '1951 No. pp.: 212 No. of copies: 5,000

Editorial Staff

Tech. Ed.: Prof. V. V. Kavrayskiy and Prof. A. P. Yushchenko

PURPOSE: A textbook for students of Mine Engineering Departments,  
specializing in mine surveying. Approved by the Ministry of  
Higher Education of the USSR for students of institutions of  
higher learning. The book is dedicated to the 175th anniversary  
of the Leningrad Institute of Mining Engineers

TEXT DATA

Coverage: The preface states that the absence of a textbook on  
cartography corresponding to the mine surveying programs of  
mine institutes and forming part of the course in higher

1/2

Kartografiya

AID 673 - I

geodesy made it necessary to publish this book. The text includes an introduction, four chapters, a conclusion and four supplements. Chapter I covers general information on cartographic projections; Chapter II, conical and corresponding azimuthal projections; Chapter III, cylindrical, perspective and other of the most important projections; Chapter IV, construction and publishing of charts. The conclusion gives a brief history of the development of cartography and the importance of cartography to the mine surveying engineer. The supplements include:  
1) a table of the radii of curvature of the spheroid of F. N. Krasovskiy for every degree of latitudes from  $0^{\circ}$  to  $90^{\circ}$ ,  
2) tables for computation of the projection of Krasovskiy's spheroid, 4) some mathematical constants. 68 figures, diagrams and maps illustrate the text.

No. of References: A few in Russian in the text and footnotes  
Facilities: None

2/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1  
et'stvennyy redaktor;  
SLAVUNOV, A.N., redaktor izdatel'stva; ZIZUL'SKAYA, V.F.,  
tekhnicheskiy redaktor

[Reducing labor consuming operations in triangulation surveying]  
Snizhenie trudoemkosti marksheiderskikh triangulatsii. Moskva.  
Ugletekhizdat, 1957. 199 p. (MLRA 10:10)  
(Triangulation)

ABRAMOV, S.K., kand.tekhn.nauk; AVERSHIN, S.G., prof., doktor tekhn.nauk;  
AMMOSOV, I.I., doktor geol.-min.nauk; ANDRIYEVSKIY, V.D., inzh.;  
ANTROPOV, A.N., inzh.; APANAS'YEV, B.L., inzh.; BERGMAN, Ya.V.,  
inzh.; BLOKHA, Ye.Ye., inzh.; BOGACHEVA, Ye.N., inzh.; BUKRINSKIY, V.A.,  
kand.tekhn.nauk; VASIL'YEV, P.V., doktor geol.-min.nauk; VINOGRADOV,  
B.G., inzh.; GOLUBEV, S.A., inzh.; GORDIYENKO, P.D., inzh.; GUSEV, N.A.,  
kand.tekhn.nauk; DOROKHIN, I.V., kand.geol.-min.nauk; KALMYKOV, G.S.,  
inzh.; KASATOCHKIN, V.I., doktor khim.nauk; KOROLEV, I.V., inzh.;  
KOSTLIVTSEV, A.A., inzh.; KRATKOVSKIY, L.F., inzh.; KRASHENINNIKOV, G.P.,  
prof., doktor geol.-min.nauk; KRIKUNOV, L.A., inzh.; LEVIT, D.Ye., inzh.;  
LISITSA, I.G., kand.tekhn.nauk; LUSHNIKOV, V.A., inzh.; MATVEYEV, A.K.,  
dots., kand.geol.-min.nauk; MEPURISHVILI, G.Ye., inzh.; MIRONOV, K.V.,  
inzh.; MOLCHANOV, I.I., inzh.; NAUMOVA, S.N., starshiy nauchnyy sotrudnik;  
NIKIPENOV, V.Ye., inzh., PAVLOV, F.F., doktor tekhn.nauk; PANYUKOV, P.N.,  
doktor geol.-min.nauk; POPOV, V.S., inzh.; PYATLIN, M.P., kand.tekhn.  
nauk; RASHKOVSKIY, Ya.Z., inzh.; ROMANOV, V.A., prof., doktor tekhn.  
nauk; RYZHOV, P.A., prof., doktor tekhn.nauk; SELYATITSKIY, G.A., inzh.;  
SPERANSKIY, M.A., inzh.; TERENT'YEV, Ye.V., inzh.; TITOV, N.G., doktor  
khim.nauk; GOKAREV, I.F., inzh.; TROYANSKIY, S.V., prof., doktor geol.-  
min.nauk; FEDOROV, B.D., dots., kand.tekhn.nauk; FEDOROV, V.S., inzh.  
[deceased]; KHOMENTOVSKIY, A.S., prof., doktor geol.-min.nauk; TROYANOV-  
SKIY, S.V., otvetstvennyy red.; TERPIGOREV, A.M., red.; KRIKUNOV, L.A.,  
red.; KUZZNETSOV, I.A., red.; MIRONOV, K.V., red.; AVERSHIN, S.G., red.;  
BURTSEV, M.P., red.; VASIL'YEV, P.V., red.; MOLCHANOV, I.I., red.;  
RYZHOV, P.A., red.; BALANDIN, V.V., inzh., red.; BLOKH, I.M., kand.  
tekhn.nauk, red.; BUKRINSKIY, V.A., kand.tekhn.nauk, red.; VOLKOV, K.Yu.,  
inzh., red.; VOROB'YEV, A.A., inzh., red.; VVONARENKO, K.A., prof., doktor  
tekhn.nauk, red.

(Continued on next card)

ABRAMOV, S.K.--- (continued) Card 2.

ZDANOVICH, V.G., prof., doktor tekhn.nauk, red.; IVANOV, G.A., doktor geol.-min.nauk, red.; KARAVAYEV, N.M., red.; KOROTKOV, G.V., kand.geol.-min.nauk, red.; KOROTKOV, M.V., kand.tekhn.nauk, red.; MAKKAVEYEV, A.A., doktor geol.-min.nauk, red.; OMEL'CHENKO, A.N., kand.tekhn.nauk, red.; SENDERZON, E.M., kand.geol.-min.nauk, red.; USHAKOV, I.N., dots., kand.tekhn.nauk, red.; YABLOKOV, V.S., kand.geol.-min.nauk, red.; KOROLEVA, T.I., red.izd-va; KACHALKINA, Z.I., red.izd-va; PROZOROVSKAYA, F.L., tekhn.red.; NADEINSKAYA, A.A., tekhn.red.

[Mining; an encyclopedia handbook] Gornos delo; entsiklopedicheskii apravochnik. Glav. red. A.M.Terpigorev. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po ugol'noi promyshl. Vol.2. [Geology of coal deposits and surveying] Geologiya ugol'nykh mestorozhdenii i marksheiderskoe delo. Redkolegiia toma S.V.Troianskiy, 1957. 646 p. (MIRA 11:5)

1. Ghlen-korrespondent AN SSSR (for Karavayev)  
(Coal geology--Dictionaries)

SOV/154-58-2-12/22

AUTHOR: Zvonarev, K. A., Professor, Doctor of Technical Sciences

TITLE: With Reference to the Article by A. M. Leonov (Po povodu stat'i  
A. M. Leonova) Some Problems in Connection With the Formation  
of Marksheyder Mining Triangulations (Nekotoryye voprosy  
geometricheskogo postroyeniya Marksheyderskikh (rudnichnykh)  
triangulyatsiy)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i  
aerofotos"yemka, 1958, Nr 2, pp 105-106 (USSR)

ABSTRACT: This is a letter to the editors of the present periodical. The  
author is of the opinion that present fundamental work in the  
field of geodesy in the USSR creates a new geodetic basis for  
the development of new surveys (of all scales) as well as for  
the solution of geodetic engineering problems (also those ac-  
cording to the Marksheyder principle). The author considers the  
elimination of triangulation nets of the 5th and 6th classes  
(according to Marksheyder) by A. M. Leonov unacceptable. Here,  
he refers to his papers (quoted by Leonov) in which he says  
that he permits three and four density stages of the triangula-  
tion of the 2nd class and uses nets with sides of 2,3 and 1,5 km

Card 1/2

SOV/154-58-2-12/22

With Reference to the Article by A. M. Leonov. Some Problems in Connection  
With the Formation of Marksheyder Mining Triangulations

length, respectively. The author proves that the establishment of nets with a point density of more than 1,5 km (whereby points are placed directly among the points of the third and even second classes) is rational. The rather disadvantageous multi-stage structure of triangulation nets for the purposes of the Marksheyder method, to which A. M. Leonov wants to revert, is more precisely defined by the author.

ASSOCIATION: Leningradskiy ordena Lenina Gosudarstvennyy universitet im.  
A. A. Zhdanova (Leningrad Lenin Order State University imeni  
A. A. Zhdanova)

SUBMITTED: May 22, 1958

Card 2/2

ZVONAREV, K.A.

Basic problems in present-day cartography [with summary in English].  
(MIRA 11:5)  
Vest. IGU 13 no.6:91-100 '58.  
(Cartography)

ZVONAREV, K.A.

All-Union conference of Universities of the U.S.S.R. on scientific  
methods in geography. Vest.LGU 13 no.18:167-169 '58.  
(MIRA 12:1)

(Geography--Study and teaching)

ZVONAREV, K.

On the "Geodesy and cartography" journal. Mat. Otd. mat. geog.  
i kart. Geog. ob-va SSSR no.1:47-48 '61. (MIRA 17:8)

ZVONAREV, K.A.

Scientific legacy of V.V.Kavraiskii. Vest.LGU 18 no.6:143-149  
'63. (MIRA 16:4)  
(Kavraiskii, Vladimir Vladimirovich)

ZVONAREV, K.A.

Problems of cartography in the light of the CPSU program. Vest.  
LGU 17 no.18:56-62 '62. (MIRA 15:10)  
(Cartography)

CHURKIN, Vladimir Gerasimovich; PAVLOVSKIY, Ye.N., akademik, glavnnyy red.;  
ZVONAREV, K.A., doktor tekhn.nauk,red.; DADIN, Ye.G., red.izd-va;  
VINOGRADOVA, N.F., tekhn.red.

[Geographical atlases] Geograficheskie atlasy. Moskva, Izd-vo Akad.  
nauk SSSR, 1961. 116 p. (Geograficheskoe obshchestvo SSSR. Zapiski.  
Novaia seriia, vol.21.)

(MIRA 14:7)

(Atlases)

ZDANOVICH, Vyacheslav Grigor'yevich; KELL', Nikolay Georgiyevich;  
ZVONAREV, Klimentiy Aleksandrovich; BELOLIKOV, Antonin Mikolayevich;  
GUSEV, Nikolay Andreyevich; BUGAYETS, Ye.A., otv. red.; SLAVOROSOV, A.Kh., red. izd-va; PROZOROVSKAYA, V.L., tekhn. red.

[Advanced geodesy] Vysshiaia geodesiia. By V.G.Zdanovich i dr.  
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1961.  
607 p. (MIRA 15:1)

(Geodesy)

ZVONAREV, N.K., inzh.

Nomograms for solving problems of the stations of ground  
masses. [Trudy] VNIMI no. 47859-76 '62 {MIRA 3787}

**CHEKMAROV, A.P.; RABINOVICH, S.N.; Prinimali uchastiyi: KUS'MIN, V.P.;  
ZVONAREV, V.K.; DEMKO, V.M.**

Investigating power conditions in the rolling of lightweight  
shaped sections on a 550mm. medium section mill. Izv. vys. ucheb.  
zav.; chern. met. 6 no.4:56-67 '63. (MIRA 16:6)

1. Dnepropetrovskiy metallurgicheskiy institut.  
(Rolling mills)

ACCESSION NR: AP5014539

W/0089/65/018/009/0483/0487  
621.039.5\*2:621.039.546

AUTHOR: Likhachev, Yu. I.; Zvonarev, V. P.; Pupko, V. Ya.

33

TITLE: Internal stresses due to uneven swelling of fissioning material

19 B

SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 483-487

TOPIC TAGS: fissioning material, reactor fuel element, fuel element swelling, internal stress, macrostress

ABSTRACT: The authors consider a new cause of macrostresses of the first kind in fuel elements, namely uneven swelling of the fissioning material, brought about by the fact that the fission products are not produced at equal rates over the cross section of the fuel element. The resultant stresses are calculated under certain simplifying assumptions, with a fuel element in the form of a long solid cylindrical rod as an example. The joint action of the stresses due to uneven swelling and of the temperature stresses is considered for brittle material, for plastic material with negligible creep (metal at relatively low temperature), and plastic material with appreciable creep (relatively high temperature level). It is shown that the uneven swelling must be taken into account in the strength calculations in the case of brittle material and material with negligible creep. Orig. art.

Card 1/2

L 01063-66

ACCESSION NR: AP5014539

has: 2 figures and 8 formulas.

ASSOCIATION: none

SUBMITTED: 25May64

ENCL: 00

SUB CCODE: NP

NR REF SOV: 003

OTHER: 004

Card 2/2 /T

GORODETSKAYA, E.G. [Horodets'ka, E.H.]; ZVONAREVA, G.N. [Zypnar'ova, H.N.];  
SOFIYENKO, T.A. [Sofienko, T.A.]; YARMOLENKO, R.A.; ZHADANOVA, R.I.

Ballistocardiography in cardiovascular pathology in children.  
Fiziol. zhur. [ukr.] 8 no.5:600-608 S-0 '62. (MIRA 17:11)

1. Department of Pediatrics of the Kiyev Post-Graduate Institute  
for Physicians and the First Children's Hospital of Shevchenko  
District, Kiyev.

ZVONAREVA, G. N., Cand Med Sci -- "Condition of the cardiovascular system in typhoid-paratyphoid diseases of children, *clinical and cardiographic data,*" according to data supplied by the clinic and cardiographs."

Stalino, 1961. (Min of Health UkSSR. Stalin State Med Inst im A. M. Gor'kiy) (KL, 8-61, 261)

LEVIN, M.M.; ZVONAREVA, L.F.

Performance of peak diode voltmeters in measuring voltage of  
video pulses. Izm. tekhn. no.1:47-50 Ja '64.

(MIRA 17:11)

ACCESSION NR: AP4007678

S/0214/63/000/007/0064/0067

AUTHOR: Zvonareva, M. L.

TITLE: The  $H_{\alpha}$  line in the prominence spectra

SOURCE: Solnechnyye dannyye, no. 7, 1963, 64-67

TOPIC TAGS: solar prominence, hydrogen line, chromosphere, prominence spectrum, solar flare,  $H_{\alpha}$  line

ABSTRACT: Parameters which characterize the physical conditions in solar prominences can be determined by comparison of theoretical and observational contours of the  $H_{\alpha}$  line. Spectrograms obtained in the summer of 1960 at Pulkovo were used for determining cross sections of the  $H_{\alpha}$  line at various heights above the chromosphere level. Formulas for computing contours and intensities of hydrogen lines were developed by solving the problem of diffusion of radiation with redistribution of energy between lines, in accordance with the frequency within the line. The velocity of gas motion in a prominence is found to be  $11 \text{ km sec}^{-1}$ . Photometric cross sections of the  $H_{\alpha}$  line become narrower with increasing height above the chromosphere level. This phenomenon

Card 1/2

ACCESSION NR: AP4007678

may be caused by decreased scattering of quanta from the center of prominence toward its periphery without any change in the physical conditions within the prominence. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Kafedra astrofiziki Leningradskogo gosudarstvennogo universiteta (Department of Astrophysics, Leningrad State University)

SUBMITTED: 00 DATE ACQ: 21Jan64 ENCL: 00

SUB CODE: AS NO REF Sov: 001 OTHER: 000

Card 2/2

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1  
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1"

ARAKELYAN, M.A.; ZVONAREVA, M.L.; KOLESOV, A.K.

Calculating the Rosseland mean value for the atmospheres of  
hot stars. Uch. Zap. LGU no.323:37-44 '64. (MIRA 17:12)

Mollier  $i - x$  diagram and its use in designing evaporators. Prum  
potravin 15 no.5:226-235 My '64.

1. Faculty of Mechanical Engineering, Czech Higher School of  
Technology, Prague.

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

ZVONICEK, J., doc. inz. dr.

"Engineering for dairy and food products" by A.W. Farrall.  
Reviewed by Zvonicek. Prum potravin 15 no.4204 Ap '64.

ZVONAREVA, M.L.

Contours of emission lines in noncoherent scattering. Vest. LGU  
15 no.13:141-146 '60.  
(Light--Scattering) (MIRA 13:7)

81250

S/043/60/000/13/14/016  
C111/C222

24.4500

AUTHOR: Zvonareva, M.L.

TITLE: On the Contours of the Emission Lines at the non-Coherent  
Scattering

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki,  
mekhaniki i astronomii, 1960, No. 13, pp. 141 - 146

TEXT: The author considers the radiation diffusion in a plane plate for a  
completely incoherent scattering. For the diffusion there results the integral  
equation

$$(9) \quad B(\tau) = \frac{\lambda}{2} \int_0^\tau K(|\tau - \tau'|) B(\tau') d\tau' + B_0(\tau),$$

where  $\tau_0$  is the optical thickness of the plate,

$$(10) \quad K(\tau) = A \int_{-\infty}^{\infty} \alpha^2(x) E i [\alpha(x)\tau] dx,$$

Card 1/3

81250

On the Contours of the Emission Lines at the  
non-Coherent Scattering

S/043/60/000/13/14/016  
C111/C222

$$(11) \quad E_i y = \int_y^{\infty} e^{-y} \frac{dy}{y}, \quad \alpha(x) = e^{-x^2}, \quad \Lambda = \frac{1}{\sqrt{\pi}}$$

and  $B$ ,  $B_0$  are defined by

$$(3) \quad \epsilon_y^0 = \sigma_y B_0, \quad \epsilon_y = \sigma_y B,$$

where  $\sigma_y$ ,  $\epsilon_y$  are the coefficients of absorption and emission,  $\epsilon_y^0$  relates to the direct emission of the sources. The solution of (9) is sought in the form

$$(13) \quad B(\tau) = a + b\tau - c\tau^2.$$

The results of the numerical calculations of  $a, b, c$  are given in tables. Then the contours of the emission lines are obtained according to the formula

$$(24) \quad I(x) = \alpha(x) \int_0^x B(\tau) e^{-\alpha(x)\tau} d\tau.$$

Card 2/3

On the Contours of the Emission Lines at the  
non-Coherent Scattering

81250  
S/043/60/000/13/14/016  
C111/C222

The appearance of a central depression is characteristical which appears for  
 $\tau_0 \sim 5$  and which increases with an increasing  $\tau_0$ .

The author mentions D. Ivanova. There are 2 figures, 4 tables and 2  
references : 1 Soviet and 1 Swiss.

Card 3/3

ZVONAREV, S. M., and A. F. FEOFANOV

Primenenie teoremy o trekh momentakh pri raschete gorizonta'l'nogo opereniia.  
(Tekhnika vozduzhnogo flota, 1940, no. 12, p. 43-47, tables, diagrs.)

Title tr.: Application of the three moment equation in the design of  
horizontal control surfaces.

TL504.T4 1940

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of  
Congress, 1955.

"APPROVED FOR RELEASE: Thursday, September 26, 2002  
APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1  
CIA-RDP86-00513R002065710018-1"

**ZVONAREVA, M.L.**

Contours of absorption lines associated with noncoherent diffraction  
[with summary in English]. Vest. LGU 13 no.7:189-195 '58.

(MIRA 11:5)

(Stars--Spectra)

*ZVONAREVA, M.L.*  
AUTHOR: ZVONAREVA, M.L.

43-7-18/18

TITLE: The Contour of the Absorption Lines for an Incoherent Diffusion Process (O konturakh liniy pogloshcheniya pri nekogerentnom rasseyaniu)

PERIODICAL: Vestnik Leningradskogo Universiteta, Seriya Matematiki, Mekhaniki i Astronomii, 1958, Nr 7 (2), pp. 189-195 (USSR)

ABSTRACT: The author determines the contour of the absorption lines for a complete incoherent diffusion process and under the following assumption on the Planck's function  $B_\nu(T)$ :

$$B_\nu(T) = B_\nu(T_0)(a+bT+c e^{-mT}).$$

The paper joins papers of V.V. Sobolev [Ref. 3, 4] and the investigation carried out by the use of probability theoretical arrangements leads to an already published result of Ueno [Ref. 5]. Some little numerical data are of certain interest. There are 3 figures, 3 Soviet and 2 foreign references.

SUBMITTED: 18 May 1957

AVAILABLE: Library of Congress

Card 1/1 1. Functions-Theory 2. Diffusion

"APPROVED FOR RELEASE: Thursday, September 26, 2002  
APPROVED FOR RELEASE: Thursday, September 26, 2002  
ZVONAREVA, S.I. (Moskva)

CIA-RDP86-00513R002065710018-1  
CIA-RDP86-00513R002065710018-1"

Zealous investigators. Priroda 49 no.5:79 My '60.  
(MIRA 13:5)  
(Nature study)

ZVONAREVA, S.I.

Study of karst phenomena by the participants of the All-Union  
Pioneers and Students Expeditions. Inform.stor.Mazhd.kom.po  
izuch.geol.geogr. kar. no.1:227-232 '60. (MIRA 15:4)

1. Tsentral'naya detskaya ekskursionno-turistskaya stantsiya.  
(Karst)

AVONAREVA, V. G.: "Homework in the English language in the tenth class in connection with polytechnic training." Academy of Pedagogical Sciences RSFSR. Sci Res Inst of Teaching Methods. Moscow, 1955. (Dissertation for the Degree of Candidate in Pedagogical Science.)

*Knizhnaya letopis'*, No. 30, 1956. Moscow.

ZVONALEVA, V.V. (Moskva)

Prothrombin time in some infectious diseases. Klin.med. 36 no.3:  
121 -124 Mr '58. (MIRA 11:4)

1. Iz bol'nitsy imeni S.P.Botkina (glavnnyy vrach - prof. A.N. Shabanov, nauchnyy rekovoditel' raboty - doktor meditsinskikh nauk E.A.Gal'perin)

(PROTHROMBIN TIME, in various dis.

commun. dis. (Rus))

(COMMUNICABLE DISEASES, blood in prothrombin time (Rus))

Processing water fowl with hot water on a semiautomatic conveyor  
line. Mias. ind. SSSR. 30 no.4:36-37 '59. (MIRA 12:12)

1. Poltavskiy myasokombinat.  
(Water birds) (Poltava--Poultry plants)

Hot water processing of waterfowl. Mias.ind.SSSR 30 no.1:43  
'59. (MIRA 12:4)

1. Poltavskiy myasokombinat,  
(Poultry plants)

ZVONAREVA

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1"

3  
Washing of the fusel oil which is withdrawn from batch rectification apparatus. S. V. Bul'nev and Z. M. Zemrev (Mitrofany Alcohol Plant, Chelyabinsk). *Spravochnik*,  
Prim. 20, No. 1, 28-3 (1954). A simple device is described with drawing, where water is bubbled through the fusel oil.  
Werner Jacobson

10-30/2

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1"

**BUSHUYEV, S.V.; ZVONAREVA, Z.R.**

**Purification of fusel oil from periodic-action rectifiers. Spirit.prom.  
20 no.1:28-29 '54.  
(Fusel oil)**

**(MLRA 7:5)**

ACCESSION NR: AP5016887

UR/0374/65/000/000/0087/0002  
678:620.179.16

AUTHOR: Zvonarzh, V. (Furdubataq); Tamshina, I. (Furdubataq)

TITLE: Static and dynamic properties of fiberglass reinforced plastics.  
Part 2. The effects of thickness

SOURCE: Mekhanika polimorov, no. 3, 1966, 87-92

TOPIC TAGS: fiberglass reinforced plastic, plastic elasticity, elasticity modulus, polyester resin, Beer equation

ABSTRACT: In a previous communication (Mekh. polim., 1965, 1, 146), the authors described the influence of the individual components of polyester resin and glass on the dynamic E and G moduli, and the mechanical loss coefficients d and d' of fiberglass-reinforced plastics. The present paper is devoted to the study of thickness effects, i.e., the influence of the number of layers and the thickness of single layers on the statically and dynamically determined E and G elasticity moduli. The temperature effects were also studied. The fiberglass-reinforced plastic was made of Yplast 31 and the unmodified CHS-Polyester 104 resin with 2% methyl-ethyl ketone peroxide and 1% of a 10% solution of cobalt naphthenate in toluene. Tests showed that the E and G moduli are, for all practical purposes, independent of the total thickness of the material; they are sensitive, however, to the thickness of a single elementary layer, i.e., to the glass content

ACCESSION NR: AP5016887

within the plastics. The results are in good agreement with theoretical approximate equations; the systematic deviation indicates that the Beer equation (F. Beer, VDI Ztschr., 1959, 101, 463) neglected the wave-like packing of the fibers and assumed an ideal connection between the resin and glass. The dynamic moduli are, as a rule, larger (in absolute terms) than the corresponding static quantities and the difference increased with the temperature. Orig. art. has: 10 formulas, 2 figures, and 3 tables.

ASSOCIATION: None

SUBMITTED: 10 Nov 64

ENCL: 00

SUB CODE: MT

NO REF SOV: 002

OTHER: 003

Card 2/2

**ZVONKOVA, Z.V.; RODIONOV, A.N.; POVET'YEVA, Z.P.**

Role of hydrogen bonding in the structures of crystalline  
hydrates of compound thiocyanates of metals. Kristallografiia  
8 no.2:275-277 Mr-Ap '63. (MIRA 17:8)

1. Fiziko-khimicheskiy institut imeni Karpova.

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1  
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710018-1"

AVONICK, Jan, doc. 102. d.r.  
Basic processes of food industry technology. Prum potravin  
16 no.1:Suppl.no.1:1-8 '65.

Experiences in taking winter precautions in waterworks. Vod  
hosp 15 no.1:6-9 '65.

1. Prazske vodarny, Prague.

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

INVENTORS: Klimov, V. V.; Androyov, A. Ya.; Nakhodnova, A. P.; Kozachenko, V. N.; Akhkozov, Ye. A.; Ivanov, D. G.; Didkovskaya, O. S.; Zvonik, V. A.

ORG: none

TITLE: A method for obtaining a piezoceramic material. Class 21, No. 183812  
[announced by Donets Branch of All-Union Scientific Research Institute of Chemical  
Reagents and of High Purity Chemicals (Donetskiy filial Vsesoyuznogo nauchno-  
issledovatel'skogo instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh  
veshchestv)]

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 42

TOPIC TAGS: piezoelectric ceramic, barium compound, lead compound, calcium compound,  
titanium compound, sintered alloy

ABSTRACT: This Author Certificate presents a method for obtaining a piezoceramic  
material from a mixture of barium, lead, calcium, and titanium compounds by sintering  
this mixture. To lower the temperature of sintering this material, the above com-  
pounds are used in the form of nitric acid solutions of barium, lead, calcium, and  
titanium. This solution is atomized in a stream of air at the temperature of 400—  
500°C. After this, the powder is sintered at the temperature of 800—10000.

SUB CODE: 11/ SUBM DATE: 21May64

Card 1/1

UDC: 621.315.612.537.226.33

ZVONIMIR, Duric

"Some information about the prices of construction of hydro electric stations  
in the Brbas - Pliva system"

SO: ELEKTROPRIVREDA, May - June 1955

SOURCE CODE: UR/0363/66/002/008/1483/1486

AUTHOR: Klimov, V. V.; Kozachenko, V. N.; Didkovskaya, O. S.; Zvonik, V. A.; Kisel', T. P.; Andreyev, A. Ya.

53  
52  
B

ORG: All-Union Scientific Research Institute of Chemical Reagents and High-Purity Substances, Donets Branch (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chislykh veshchestv, Donetskii filial)

TITLE: Preparation of piezo- and ferroelectric ceramics using spray dried solutions

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 8, 1966, 1483-1486

TOPIC TAGS: piezoelectric ceramic, ferroelectric, ceramic technology, ceramic product, property, barium titanate, titanate, lead, calcium

ABSTRACT: A preparative method was described for piezo- and ferroelectric ceramic materials on the base of triple titanate of barium, lead, and calcium. The method was designed to replace the conventional ceramic sintering technique in view of its substantial disadvantages. The first step of the described method consisted of preparation of the finely dispersed (particle size 6-8  $\mu$ ) powder of the basic barium, lead, and calcium nitrates by spray drying of their aqueous solutions following a technique invented by the authors [Author Certificate no. 901979-29-14, 21.05.1964]. The powdered nitrates were then converted into titanates of varied

Card 1/2

UDC: 666.3:537.226.33+666.3:537.228.1

ACC NR: AP6029824

composition by firing the nitrate powder at 900-1000C at which temperature formation of the solid solutions with perovskite structure is completed. The particle size of titanates after firing was about 1  $\mu$ . High-purity powders may be obtained from adequately pure starting materials. The sintering of these powders into ceramic products occurs at a temperature in the 1230-1280C range, which is 100-150C lower than the temperature range of sintering the powders produced by conventional ceramic technique. The electrophysical properties of the ceramic products obtained by spray drying were shown to be superior to those of the products of ceramic technology. Notably, the piezoelectric modulus ( $d_{31}$ ) was comparatively higher and, in certain samples, constant in the -60 to +80C range. Universality of the method described was stressed, insofar as it may be applied to most of the ferro- and piezoelectric ceramics presently used. Orig. art. has: 4 figures and 2 tables. [JK]

SUB CODE: 11/ SUBM DATE: 22Oct65/ ORIG REF: 001/ ATO Press 5065

Card 212-10

ZVONIMIR GALL

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065710018-1"

"A biological Method of investigation of Insecticides in Vitro". Zvonimir Gall & Isak Levi Vets. at Vet. Inst. of Republic of Bosnia-Hercegovina, Sarajavo.

SOURCE: Vet., SVEZAK 4, p. 667, 1953

ROMM, Ye. S.; GORYUNOV, I. I.; GMID, L. P.; GROMOV, V. K.;  
DOROFEEVA, T. V.; KNORING, L. D.; KALACHEVA, V. M.; TATARINOV,  
I. V.; KLEYNOV, Yu. F.; KAPLAN, M. Ye.; ZVONITSKAYA, I. V.;  
MAZURKEVICH, Z. I.; DRRYABINA, N. N.; RUSAKOVA, L. Ya., vedushchiy  
red.; BARANOVA, L. G., tekhn. red.

[Methodological text on the study of the fracturing of rocks  
and fractured oil and gas reservoirs]. Metodicheskoe posobie  
po izucheniiu treshchinovatosti gornykh porod i treshchinnykh  
kollektorov nefti i gaza. Leningrad, Gostoptekhizdat, 1962.  
76 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'-  
skii geologorazvedochnyi institut. Trudy, no. 201).

(MIRA 16:4)

(Joints(Geology)) (Oil sands)

**EVONTSKAYA, T.M.**  
Hypertonia in scarlet fever in children. Sovet.med. no.3:9-10  
Mr '50. (CLML 19:2)

1. Of the Department of Children's Diseases, First Moscow Order  
of Lenin Medical Institute (Director of Department -- Prof.  
V.I.Molchanov).

S/123/61/000/014/015/045  
A004/A101

AUTHORS: Zvonitskiy, A. Yu.; Belosel'skiy, N. V.

TITLE: The practice of developing and introducing the gang technology.

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 14, 1961, 2, abstract 14B8. (V sb. "Grupovaya tekhnol. v mashinostr. i priborostr." Moscow - Leningrad, Mashgiz, 1960, 323-339)

TEXT: The introduction of the gang method was started with automatic and turret-lathe operations. For these purposes small-size pneumatic units with a clamping stress of 500 kg were utilized which made it possible to fasten in one fixture 3-4 parts simultaneously. The authors describe: a four-position gang fixture for the milling of slots, grooves and flats, a 72-position gang setting of a lapping automatic, indexing draw-in attachment, semi-automatic gang milling fixture for the processing of horned nuts, for-spindle drilling head with adjustable inter-center distances, gang jigs with automatic fastening and ejection of parts, fixture for the mandrel-less winding of cylindrical springs increasing the productivity by a factor of 10-15. The authors present examples of gang

Card 1/2

The practice of developing and introducing the ... 9/123/61/000/014/015/045  
A004/A101

machining on centerless grinding and thread-rolling machines, as well as on  
cold-upsetting automatics. There are 16 figures.

I. Briskman

[Abstracter's note: Complete translation]

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/3998

Zvonitskiy, Aleksandr Yulianovich, Engineer

Opyt gruppovoy obrabotki detaley na revol'vernykh stankakh (The Practice of Group Machining of Parts on Turret Lathes) Leningrad, 1959. 23 p. (Series: Leningrad. Dom nauchno-tehnicheskoy propagandy. Obmen peredovym opyтом. Seriya: Mekhanicheskaya obrabotka metallov, vyp. 10) 6,500 copies printed.

Sponsoring Agencies: Leningrad. Dom nauchno-tehnicheskoy propagandy, and Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znanii RSFSR.

Ed.: I.I. Verzhbinskaya, Engineer; Tech. Ed.: V.L. Gvirts.

PURPOSE: This booklet is intended for production engineers and technicians in machine-building plants.

COVERAGE: The booklet deals with group machining of parts on turret lathes. Two basic groups of turret lathes are discussed: 1) the 1336M turret lathe of the Kiyevskiy zavod (Kiyev Plant) and the "Skoda-36" with 36-mm spindle holes, and 2) turret lathes of the "Boley-type", such as "Boley", "Leymen," and "Wolman".

Card 1/2

The Practice of Group (Cont.)

SOV/3998

with 10- and 20-mm spindle holes. The author states that the adoption of group machining of parts on turret lathes results in considerable economy of machining time and the number of special fixtures and cutting tools required. The method of group machining is explained by means of classification diagrams, operation instruction sheets, and classification guiding sheets. The material presented is said to be limited in scope, as it is based on practices and methods developed in only one plant. No personalities are mentioned. There are 3 references, all Soviet.

TABLE OF CONTENTS: None given.

AVAILABLE: Library of Congress

Card 2/2

VK/rw/gmp  
7-27-60

GAFT, Ya.M., kand.med.nauk; Prinimalni uchastiye: BRANZBURG, N.A., vrach;  
GOL'TS, I.P., vrach; GORELIK, Ye.S., vrach; ZVONKINA, O.M., vrach;  
LIVSHITS, R.I., vrach; LUR'YE, Ye.L., vrach; OZHE, N.B., vrach;  
RYBAL'SKAYA, V.G., vrach; CHELNOKOVA, A.K., vrach; YAVORSKIY, A.V.,  
vrach

Dynamics of the tuberculous process in patients transferred to the  
third group of dispensary registration. Probl. tub. 38 no.3:3-8  
'60. (MIRA 14:5)

1. Iz protivotuberkuleznogo dispansera No.4 Moskvy (glavnny vrach  
zasluzhenny vrach RSFSR S.M.Zamukhovskiy).

(TUBERCULOSIS)

BUTOMO, D.G.; VAYZHLYA, N.M.; ZVONKINA, V.F.; KOSHURIN, A.V.; SERGEYEV, L.N.;  
FRUMKINA, Yu.A.

Concerning the "Handbook on the processing of nonferrous metals and  
alloys" Tsvet.met. 35 no.12:60 D 162. (MIRA 16:2)

1. Sovet Nauchno-tehnicheskogo obshchestva zavoda "Krasnyy  
Vyborzhets".

(Nonferrous metals)

~~ZIVKO, LUKOCEVIC~~  
A new method for electric-arc welding in  $CO_2$  UM. Zavarivanje 5  
no.11/12;260-266 D '62.

KOS'KOV, B.I.; MUKHIN, N.S.; SMIRNOV, A.A., kand. tekhn. nauk; NIKITIN, V.I., prepodavatel'; KONDRAT'YEVA, N.Ya., kand. tekhn. nauk, prepodavatel'; LOSEV, K.A., dotsent; ZVONKOV, A.P.; KOMAROVSKIY, V.M.; MARCHENKO, S.N., kand. tekhn. nauk

Discussion of an article by B.I. Gerzhuly. Geod. i kart. no.4:28-36 Ap '64. (MIRA 17:8)

1. Nachal'nik tekhnicheskogo otdela Moskovskogo gorodskogo tresta geologo-geodezicheskikh i kartograficheskikh rabot (for Kos'kov). 2. Nachal'nik kompleksnogo otdela Moskovskogo otdeleniya TSentral'nogo tresta inzhenerno-stroitel'nykh izyskaniy (for Mukhin). 3. Nachal'nik geodezicheskoy sluzhby pri Upravleni glavnogo arkhitekta Voronezha (for Smirnov) 4. Kafedra geodezii Khabarovskogo politekhnicheskogo instituta (for Nitkin). 5. Kafedra kartografii Leningradskogo gosudarstvennogo universiteta (for Kondrat'yeva). 6. Kuybyshevskiy inzhenerno-stroitel'nyy institut (for Losev). 7. Rukovoditel' sektora Nauchno issledovatel'skogo institut gradostroitel'stva Kiiev (for Marchenko).

ACCESSION NR: AP4041736

S/0181/64/006/007/2198/2200

AUTHORS: Girayev, M. A.; Karpovich, I. A.; Zvonkov, B. N.

TITLE: Frequency dependence of the field effect in photosensitive films of CdS

SOURCE: Fizika tverdogo tela, v. 6, no. 7, 1964, 2198-2200

TOPIC TAGS: thin film, cadmium sulfide, photoconductivity, frequency dependence, carrier mobility, photosensitivity

ABSTRACT: The investigation was undertaken in view of recent interest in such films, brought about by the development of field-effect transistors on their basis (P. K. Weimer, Proc. IRE v. 50, 1526, 1962). The films were prepared on glass substrates by evaporation in vacuum, and activated by heat treatment with air in a photoconductor powder. The frequency dependence was investigated by the method of Aigrain et al. (J. Phys. Rad. v. 13, 587, 1952). Constant

Card 1/5

ACCESSION NR: AP4041736

illumination was used to reduce the layer resistance and to make the method usable at high temperatures. The effective carrier mobility was found to be practically independent of the temperature but highly dependent on the intensity of illumination. For unactivated CdS layers with increased dark conductivity and weak photosensitivity, the effective mobility did not exceed  $1 \text{ cm}^2/\text{V}\cdot\text{sec}$  and was practically constant up to 20 kcs. The appreciable change in the effective mobility of photosensitive layers occurs in the same frequency interval in which the photocurrent changes strongly as a frequency of the light modulation frequency and is apparently connected with relaxation of the photoconductivity. The decrease in mobility beyond about 20 kcs may be due to disturbance of the equilibrium of the induced carriers with rapid surface states. A somewhat unexpected effect is that in polycrystalline CdS films the effective mobility at high frequencies may become comparable with that for CdS single crystals. This is confirmed by Hall-effect measurements, which will be reported elsewhere. "The authors thank S. Abdiyev

Card 2/5

ACCESSION NR: AP4041736

for preparing the samples for the investigation." Orig. art. has:  
2 figures.

ASSOCIATION: Gor'kovskiy gosudarstvennyy universitet (Gorkiy  
State University)

SUBMITTED: 22Feb64

ENCL: 02

SUB CODE: SS, EC

NR REF SOV: 002

OTHER: 004

Card 3/5

ACCESSION NR: AP4041736

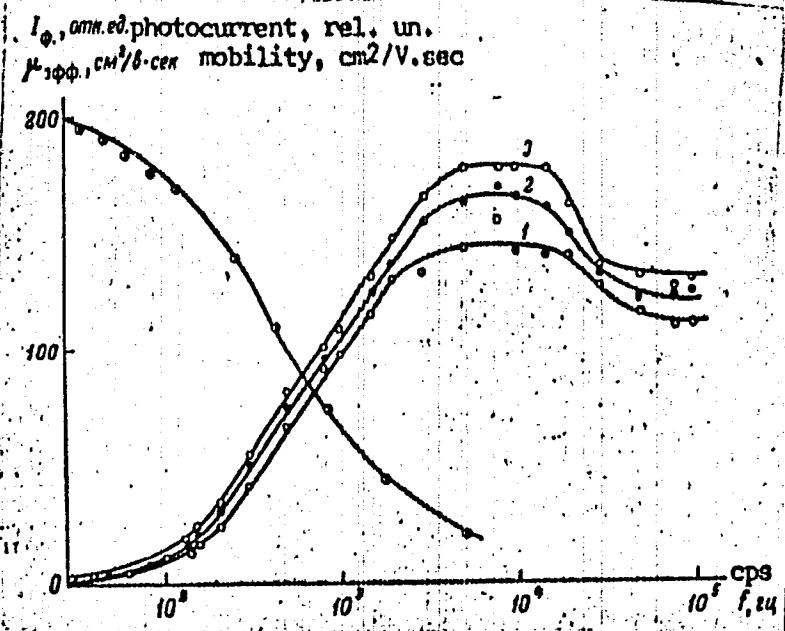
ENCLOSURE, 01

Frequency dependence of effective carrier mobility in CdS film (sample 1) under constant illumination

T, °C: 1 - 25, 2 - 58, 3 - 88;

4 - photocurrent vs. light modulation frequency at 25°C

Card 4/5



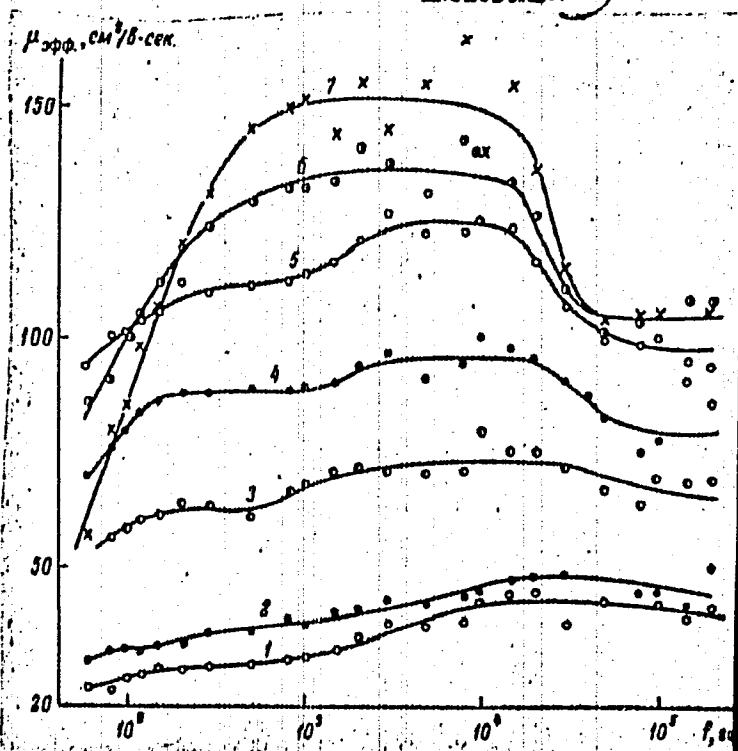
ACCESSION NR: AP4041736

ENCLOSURE: 02

Frequency dependence of effective carrier mobility in CdS film (sample 2) under different illuminations

Film resistance under illumination, kilohm: 1 - 1000, 2 - 600, 3 - 300, 4 - 100, 5 - 40, 6 - 20, 7 - 10.

Card 5/5



Automatic welding of aluminum with a melting electrode. Avtom.svar.  
9 no.1:21-28 Ja-F '56. (MIRA 9:6)

1.Ordens Trudovogo Krasnogo Znameni Institut elektrosvarki imeni  
Ye.O.Patona AN USSR.  
(Aluminum—Welding) (Electric welding)

**BABKIN, D.M.; ZVONKOV, M.L.; VERCHENKO, V.A.**

Making welded aluminum-magnesium alloy containers. Avtom. svar.  
11 no. 4:84-91 Ap '58. (MIRA 11:6)

1. Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im.  
Ye.O. Patona AN USSR (for Babkin, Zvonkov). 2. Trest po montazu  
prodovol'stvennykh predpriyatiy (for Verchenko).

(Aluminum-magnesium alloy—Welding)  
(Tanks—Welding)

**RABKIN, D.M.; ZVONKOV, M.L.**

Automatic welding of aluminum using twin electrodes. Avtom. svar.  
11 no. 5:25-31 My '58.  
(MIRA 11:6)

1. Ordona Trudovogo Krasnogo Znameni Institut elektrosvarki im.  
Ye.O. Patona AN USSR.

(Aluminum-Welding) (Electrodes)

125-58-4-12/15

AUTHORS: Rabkin, D.M., Candidate of Technical Sciences, Zvonkov, M.L. and Verchenko, V.A., Engineers

TITLE: Experience in Constructing Welded Aluminum-Magnesium Containers (Opyt izgotovleniya svarnykh yemkostey iz aluminievogo-magniyevogo splava)

PERIODICAL: Avtomaticheskaya Svarka, 1958, Nr 4, pp 84-88 (USSR)

ABSTRACT: A detailed description is given of all operations performed in assembling 700 m<sup>3</sup> aluminum-magnesium alloy containers at the Kombinat sinteticheskikh zhirozameniteley (Synthetic Fat Substitutes Combine). The electric arc welding method is used for all horizontal connections, and oxy-gas (propane-butane mixture) for the vertical welds which are welded by two operators simultaneously - one on the inside and one on the outside of the container, so that the operation proceeds with only one welding puddle. The information includes the chemical composition of the base metal - "AMg5B" alloy - and special "AN-A103" electrode coating and "AN-A201" flux developed for the purpose at the Electric Welding Institute imeni Paton (Tables 1, 2). The following persons participated in the work:

Card 1/2

125-58-4-12/15  
Experience in Constructing Welded Aluminum-Magnesium Containers

G.B. Al'terman, I.M. Bolotin, V.M. Pauler, L.D. Polonskiy,  
O.A. Videnskiy, P.K. Chubukov, I.I. Kravtsov, Ya.M.  
Yalovoy.

There are 3 tables and 7 photographs.

ASSOCIATION: Institut elektrosvarki imeni Ye.O. Patona AN UkrSSR (Electric Welding Institute imeni Ye.O. Paton of the AS UkrSSR);  
Prodmontazh.

SUBMITTED: December 3, 1957

AVAILABLE: Library of Congress

Card 2/2

ZVONKOV, M.L.

125-58-5-4/13

AUTHORS: Rabkin, D.M., and Zvonkov, M.L.

TITLE: Automatic Welding of Aluminum by a Split Electrode (Avtomatischeeskaya svarka alyuminiya rasshcheplennym elektrodom)

PERIODICAL: Avtomatischeeskaya Svarka, 1958, Nr 5, pp 25-31 (USSR)

ABSTRACT: The peculiarities and application of the split-electrode method of welding were given previously [Ref. 2,3 and 4]. The method consists of the use of two electrodes moving parallel to one another and producing two puddles which merge when the distance between the electrodes diminishes. The merged-puddle is wider and shallower than the puddle produced by a single arc. The method is schematically illustrated (Fig. 1) and calculations of the fusion depth as a function of the distance between electrodes are made. The method permits welding butt-joints without the use of a steel support. The welds are dense, wide, with good mechanical properties. Regular welding equipment needs only minor adjustment when applying the split-electrode method: a special pulling-type holder (Fig. 5) with two pairs of guide pipes, and an additional bobbin for electrode wire. The method has been successfully introduced at the Kiyev plant

Card 1/2

125-58-5-4/13

Automatic Welding of Aluminum by a Split Electrode

"Bol'shevik" where it is used for welding aluminum vessels (the technology is briefly described in figure 6 and 7). The following advantages resulted: consumption of electrode wire has been reduced by 40%, and electric energy by 20%. Work efficiency has increased three times as compared with manual arc welding. The following engineers of the "Bol'shevik" plant took part in developing the split-electrode welding technology: I.M. Mirgorodskiy, F.S. Bugriy, V.M. Ponomar', I.M. Savich, V.M. Grishchenko.

There are 7 figures and 5 Soviet references.

ASSOCIATION: Institut elektrosvarki imeni Ye.O. Patona AN UkrSSR (Electric Welding Institute imeni Ye.O. Paton of the AS UkrSSR)

SUBMITTED: January 9, 1958

AVAILABLE: Library of Congress

Card 2/2

APPROVED FOR RELEASE: Thursday, September 26, 2002

APPROVED FOR RELEASE: Thursday, September 26, 2002

Vedomosti norgich spashov svarki v promyshlennosti: sbornik stat'j i lekcion. of New Welding Methods in Industry. Col. Nauk. 1960. v. 3) Kijev. Gos. Izd-vo Tekhn. Liter. 207 p. 5,000 copies printed.

Sponsoring Agency: Ordona Trudovogo Krasnogo Znameni Institut Elektrosvarki imeni Akademika Ye. O. Patona Akademii Nauk Ukrainskoy SSR.

Ed.: M. Pisarenko; Tech. Ed.: S. Matusevich.

PURPOSE: This collection of articles is intended for personnel in the welding industry.

CONTENTS: The articles deal with the combined experiences of the Institute of Electrosvarki imeni Ye. O. Patona (Electric Welding Institute imeni Ye. O. Paton) and several industrial enterprises in solving scientific and engineering problems in welding technology. Problems in the application of new methods of mechanized welding and electroslag welding in industry are discussed. The third collection of articles published under the same title. The foreword was written by Ye. O. Paton, Academician of the Academy of Sciences of Ukraineian SSR and Lenin prize winner. There are no references.

## TABLE OF CONTENTS:

CIA-RDP86-00513R002065710018-1  
CIA-RDP86-00513R002065710018-1

154

Zashchirich, R. I. [Candidate of Technical Sciences].  
S. I. Randol' [Doris] [Candidate of Technical Sciences].  
Electric Welding Institute imeni Ye. O. Paton].  
Z. O. Korzhinskaya [Candidate of Technical Sciences].  
Terninichy nauchno-issledovatel'skiy trubnyy institut.  
(Ukrainian Scientific Research Institute for the Pipe Industry), and S. A. Svitik [Chief Engineer, Chelyabinsk truboprovodnyy zavod (Chelyabinsk Pipe Mill)].  
New Process for Producing Large-Diameter Straight-Weld Pipes for Oil and Gas Lines.

155

Zemchenko, I. I. [Engineer]. D. M. Sabchen [Candidate of Technical Sciences]. I. N. Savchenko [Engineer, Electric Welding Institute imeni Ye. O. Paton]. V. A. Verchensko [Engineer of the Trust "Prodmetach" [Trust for Production of Food Industry Establishments] and V. G. Malinovsky [formerly Chief Engineer of the "Obol' Shchiv" Incorporated].  
Experience in the Successful Welding of Aluminum and its Alloys.

156

Zosobets, O. G. [Engineer]. I. N. Kovalchuk [Engineer].  
L. S. Sankovskiy-Sivashenko [Engineer, Electric Welding Institute imeni Ye. O. Paton]. V. G. Sivashenko [Chief Engineer, Belgorodskiy Tsvod (Second Series Trust)], N. P. Savchenko [Chief of the Welding Department, Krasnogvardeyskiy zavod "Sibtrazhmet" (Siberian Heavy Machinery Plant)], and V. G. Kolyutov (Sverdlovsk, Heavy Machinery Plant). Sverdlovskiy zavod "Trazhmet" [Large Type Steel Tie-Rings for Gaskets Welding of Large Diameter Tie-Rings for Gaskets Alina

176

167

157

158

159

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

1001

1002

1003

1004

1005

1006

1007

1008

1009

1010

1011

1012

1013

1014

1015

1016

1017

1018

1019

1020

1021

1022

1023

1024

1025

1026

1027

1028

1029

1030

1031

1032

1033

1034

1035

1036

1037

1038

1039

1040

1041

1042

1043

1044

1045

1046

1047

1048

1049

1050

1051

1052

1053

1054

1055

1056

1057

1058

1059

1060

1061

1062

1063

1064

1065

1066

1067

1068

1069

1070

1071

1072

1073

1074

1075

1076

1077

1078

1079

1080

1081

1082

1083

1084

1085

1086

1087

1088

1089

1090

1091

1092

1093

1094

1095

1096

1097

1098

1099

1100

1101

1102

1103

1104

1105

1106

1107

1108

1109

1110

1111

1112

1113

1114

1115

1116

1117

1118

1119

1120

1121

1122

1123

1124

1125

1126

1127

1128

1129

1130

1131

1132

1133

1134

1135

1136

1137

1138

1139

1140

1141

1142

1143

1144

1145

1146

1147

1148

1149

1150

1151

1152

1153

1154

1155

1156

1157

1158

1159

1160

1161

1162

1163

1164

1165

1166

1167

1168

1169

1170

1171

1172

1173

1174

1175

1176

1177

1178

1179

1180

1181

1182

1183

1184

1185

1186

1187

1188

1189

1190

1191

1192

1193

1194

1195

1196

1197

1198

1199

1200

1201

1202

1203

1204

1205

1206

1207

1208

1209

1210

1211

1212

1213

1214

1215

1216

1217

1218

1219

1220

1221

1222

1223

1224

1225

1226

1227

1228

1229

1230

1231

1232

1233

1234

1235

1236

1237

1238

1239

1240

1241

1242

1243

1244

1245

1246

1247

1248

1249

1250

1251

1252

1253

1254

1255

1256

1257

1258

1259

1260

1261

1262

1263

1264

1265

1266

1267

1268

1269

1270

1271

1272

1273

1274

1275

1276

1277

1278

1279

1280

1281

1282

1283

1284

1285

1286

1287

1288

1289

1290

1291

1292

1293

1294

1295

1296

1297

1298

1299

1300

1301

1302

1303

1304

1305

1306

1307

1308

1309

1310

1311

1312

1313

1314

1315

1316

1317

1318

1319

1320

1321

1322

1323

1324

1325

1326

1327

1328

1329

1330

1331

1332

1333

1334

1335

1336

1337

1338

1339

1340

1341

1342

1343

1344

1345

1346

1347

1348

1349

1350

1351

1352

1353

1354

1355

1356

1357

1358

1359

1360

1361

1362

1363

1364

1365

1366

1367

1368

1369

1370

1371

1372

13

## PERIODICAL ABSTRACTS

Sub.: USSR/Engineering

AID 4191 - P

RABKIN, D. M. and M. L. ZVONKOV

VOPROSY TEKHNOLOGII AVTOMATICHESKOY SVARKI ALYUMINIYA PLAVYASHCH-  
IMSYA ELEKTRODOM (Technical problems in Automatic Welding of  
Aluminum with Melting Electrodes). Avtomaticheskaya svarka,  
no. 1, Ja/F 1956: 21-29.

The technique and equipment used in automatic welding of aluminum with semi-open melting electrodes are discussed: amount of current required, thickness of electrode-wire used and determination of the electrode feeding speed and most favorable voltage. The selection of the proper welding speed and the exact quantity of flux used to get the best quality of welded seam with consideration of the thickness of the metal to be welded, and a description of a spout mechanism for feeding electrode wire, as well as of a measuring hopper for spreading flux, are presented. One table, 3 graphs and 7 macropictures. Four Russian references, 1953-1955.